# 2007-08

# Missouri Assessment Program - Alternate

# (MAP-A)

## Science Standard-Setting Report

**June 3 & 4, 2008**

**Columbia, Missouri**


Prepared by Measured Progress for the
Missouri Department of Elementary and Secondary Education

# Introduction

In response to requirements outlined in the Individuals with Disabilities Education Act (IDEA) Amendments of 1997, the reauthorization of IDEA in 2004, and the No Child Left Behind Act of 2001 (NCLB), states have developed alternate assessments for students with disabilities. A variety of measurement formats have been implemented in these assessment systems (Thompson & Thurlow, 2001; Roeber, 2002; Smith, 2003; Malehorn, 1994; Navarrete, Wilde, Nelson, Martinez, & Hargett, 1990). Due to differential requirements within their Individual Education Plans (IEPs), students with disabilities may be administered different assessments appropriate to their level of ability. The test scores and performance level categories of these students, however, are reported as a single group. Given the nature of the alternate assessments, setting performance level standards for the alternate assessments can be challenging in terms of educational and policy considerations.

A number of standard setting methods have been developed over the last 30 years (Berk, 1986; Reckase, 2000; Hambleton, Jaeger, Plake, & Mills, 2000; Cizek, 2001; Hambleton & Powell, 1983; Kane, 1994; Livingston & Zieky, 1982; Lunz, 1995). Most of the methods (e.g., Bookmark, Body of Work, etc.) were developed in large-scale assessment settings. Each has its advantages as well as a number of limitations. The choice for a particular application should be based on a thorough review of existing methods in terms of their pros and cons for the concrete testing situation at hand (Cizek, 1996; Reckase, 2000; Hambleton, 2001). The most important criteria are:

(a) The appropriateness of the method for the concrete situation;
(b) The feasibility of the method implementation under the current circumstances;
(c) The existing validity evidence for the quality of the selected method.

Given the complexity of alternate assessments (e.g., differential assessments, unique learning attributes of this population, etc.), there is increased emphasis on developing new

standard setting methods, or modifying existing methods, appropriate to these new conditions. Not many methods can address the complexity, so states tend to retrofit existing methods to their alternate assessment programs. Some of the very popular standard setting methods used in alternate assessment programs so far include Modified Angoff (Angoff, 1971), Bookmark (Lewis , Mitzel, & Green, 1996), Body of Work (Kingston, Kahl, Sweeney, & Bay, 2001), and Judgmental Policy Capturing (Jaeger, 1995).

Feasibility and validity are of great importance when evaluating a standard setting method (Cizek, 1996). The modified Body of Work (mBoW) procedure was chosen for the Standard setting activities for the Missouri Alternate Assessment in Science. In this method, panelists review student portfolios that represent the range of student scores. The panelists independently classify each student portfolio into one of four performance levels based on their understanding of the alternate performance level descriptors. Because the logistic burden of classifying each portfolio into one of four performance levels at the outset, as outlined in the BoW approach, is quite high, a modified approach was implemented. Panelists first focused on the middle cut, classifying portfolios above or below this cut. As a second step they took the portfolios they had classified below the middle cut and classified them into the lower two achievement levels. As a final step panelists took the portfolios they had classified above the middle cut and classified them into the upper two achievement levels. This modified version of the method has been in use for a number of years, substantially reduces the logistical burden of the method, and has been found to yield reasonable and defensible cut points. This report documents the procedures and results of the mBoW procedure implemented for the Missouri Alternate Assessment in Science.

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# Standard Setting Process

The Missouri Alternate Assessment in Science occurred June 3rd and 4th, 2008. At the June standard-setting meeting, cut-points were recommended for the alternate Science assessment in grades five, eight, and eleven using the data from the spring 2008 administration. This report documents the procedures and results of the June standard-setting meeting.

Each panel consisted of eleven to twelve participants. Each panel completed the standard-setting process for one grade level for two days. The modified Body of Work (mBoW) standard-setting method (Kingston, Kahl, Sweeney, & Bay, 2001) was implemented for all grades. In the Body of Work method, panelists are presented with a set of actual student work (in this case, student science entries) and make their judgments based on those work samples. Specifically, panelists examine each student work sample and determine which performance level best matches the particular skills and abilities the student exhibits through his/her performance on the work sample.

The Body of Work standard setting method was developed specifically for use with assessments that are designed to allow for a range of student responses, such as a portfolio and performance based assessments. he modified BoW procedure was used for science standard-setting in the same manner that it had been utilized for setting standards on the MAP-A mathematics and communication arts in 2006.

To help ensure consistency of procedures between panels, all participants attended a large-group training session at the beginning of the meeting. In addition, each panel was led through the standard setting process by a trained facilitator from Measured Progress.

This report is organized into three major sections, describing tasks completed prior to, during, and following the standard-setting meeting.

# 1. TASKS COMPLETED PRIOR TO THE STANDARD-SETTING MEETING

## 1.1 Creation of Achievement Level Descriptors (ALDs)

The ALDs presented to panelists provided the official description of the set of knowledge, skills, and abilities that students are expected to display in order to be classified into each performance level. These descriptors were created prior to the standard-setting meeting by staff of the Missouri Department Elementary and Secondary Education (DESE). The draft descriptors were created to mirror the already existing mathematics and communication arts descriptors. The draft descriptors are provided as Appendix A of this report.

## 1.2 Preparation of Materials for Panelists

The following materials were assembled for presentation to the panelists at the standard setting-meeting:

- Meeting Agenda
- Draft Alternate Achievement Level Descriptors (ALDs) for grades 5, 8 and 11
- MAP-A Portfolios representing the range of possible scores
- Rating Forms for each step in the process
- Evaluation Form for panelists to respond to the overall process, the factors that influenced their decisions and their overall confidence in the cut scores being recommended

The ALDs, meeting agenda, rating forms, and evaluation form are provided in Appendix A through D of this report, respectively.

## 1.3 Preparation of Presentation Materials

The PowerPoint presentations used in the opening session were prepared prior to the meeting. Two sets of PowerPoint slides are included as Appendix E of this document: the first set provides an overview of the Missouri Alternate Assessment, the criteria for participation in the assessment, and an explanation of the administration and scoring procedures. The second set

provides an overview of the issues of standard setting, specifics about the standard setting process, and an overview of the activities the panelists would be completing during the standard-setting meeting.

## 1.4 Preparation of Instructions for Facilitators Documents

A document was created for the group facilitators to refer to while working through the process. This document outlines the step-by-step process that the facilitator leads the panelists through during standard setting. Facilitators are provided a training prior to the standard setting meeting where they become familiar with the process, materials and facilitator script. The facilitators for the MO standards setting meeting consisted of two program managers and an assistant director. Responsibilities during the meeting include: time management, keeping participants on task, interacting with participants, and facilitating the group discussions. The facilitators are also responsible for the security of the materials and collecting panelist rating forms. The facilitator document for Science is provided in Appendix F.

## 1.5 Preparation of Systems and Materials for Analysis During the Meeting

The computational programming to carry out all analyses during the standard-setting meeting was completed and thoroughly tested prior to the standard-setting meeting. The program designed to calculate cuts and impact data was written using SAS statistical software.

## 1.6 Selection of Panelists

Panelists were recruited and selected to reflect as diverse of a population as possible. The Assessment Resource Center (ARC) and Missouri DESE staff worked together to recruit panelists, with DESE's final approval over participant selection.

The goal of the panelist recruitment was to assemble panels of approximately 12 participants. Ideally, each panel was to include a minimum of six special education teachers

experienced in working with students with significant disabilities, three subject area content teachers, and three school administrators, higher education personnel, stakeholders from interest groups related to significant disabilities, and/or parents of students with significant cognitive disabilities. An additional goal was for the panels to reflect a balance of gender, race/ethnicity, and geographic location. Finally, panelists were selected who were familiar either with the grade level subject matter or the special education population for which they would be setting standards. The numbers of panelists who participated in the standard setting ranged from eleven to twelve per group, as shown in Table 1 below. A list of the panelists' affiliations and their roles can be found in Appendix G.

**Table 1: Numbers of Participants by Group**

| Panel | Number of Panelists |
|---|---|
| Science - Grade 5 | 12 |
| Science - Grade 8 | 12 |
| Science - Grade 11 | 11 |
| Total | 35 |

### 1.6.1 Participant Demographics

As part of the application process for panelist recruitment panelists were asked to self-report demographic information. Table 2 shows the gender of the participants in each grade group, and Table 3 shows their ethnicity. Table 4 shows the work experience of the participants in each grade group based on the number of years of teaching experience of the participants.

**Table 2: Gender of Participants by Group**

| Panel | N | Male | Female |
|---|---|---|---|
| Science - Grade 5 | 12 | 8.3% | 91.7% |
| Science - Grade 8 | 12 | 16.7% | 83.3% |
| Science - Grade 11 | 11 | 27.3% | 72.7% |

**Table 3: Ethnicity of Participants by Group**

| Panel | N | Asian/Pacific Islander | African American | American Indian | Hispanic | White | Other | No Response |
|---|---|---|---|---|---|---|---|---|
| Science - Grade 5 | 12 | 0.0% | 0.0% | 0.0% | 0.0% | 91.7% | 0.0% | 8.3% |
| Science - Grade 8 | 12 | 8.3% | 0.0% | 0.0% | 0.0% | 83.3% | 0.0% | 8.3% |
| Science - Grade 11 | 11 | 0.0% | 0.0% | 9.1% | 0.0% | 91.9% | 0.0% | 0.0% |

**Table 4: Number of Years Teaching of Participants by Group**

| Panel | N | 1-5 | 6-10 | 11-15 | 16-20 | 21+ | No Response |
|---|---|---|---|---|---|---|---|
| Science - Grade 5 | 12 | 8.3% | 16.7% | 16.7% | 16.7% | 33.3% | 8.3% |
| Science - Grade 8 | 12 | 41.7% | 25% | 8.3% | 0.0% | 16.7% | 8.3% |
| Science - Grade 11 | 11 | 9.1% | 36.4% | 9.1% | 27.3% | 18.2% | 0.0% |

# 2. TASKS COMPLETED DURING THE STANDARD-SETTING MEETING

## 2.1 Orientation

The standard-setting meeting began with a general orientation session that was attended by all panelists. The purpose of the orientation was to ensure that all panelists heard the same message about the need for and goals of standard setting and about their part in the process. The orientation consisted of three parts. First, DESE welcomed the panelists and thanked them for participating, provided some context about the Missouri Alternate Assessment and the need for setting standards, and some general information about their role in the process. Next, a Measured Progress Special Education Assistant Director provided an overview of the MAP-As, including participation criteria, and administration and scoring procedures. Finally, a Measured Progress psychometrician gave an introduction to the issues of standard setting and to the standard-setting method that was being used for Missouri, and provided an overview of the activities that the standard-setting panelists would be completing. Panelists were given an opportunity to ask questions at the end of the session.

Once the general orientation was complete, each panel reconvened into its breakout room, where the panelists received more detailed training and completed the standard-setting activities.

## 2.2 Standard-Setting Process

The standard-setting process included three rounds; in the first round, panelists reviewed and discussed the ALDs and then recommended cut-points individually without discussion. Then, in Rounds 2 and 3, they recommended cut-points individually, following extensive group

discussion. Because of the large quantity of assessment materials the panelists had to familiarize themselves with, the three rounds of ratings were further broken down into smaller tasks. Panelists started with the middle cut, between *Basic* and *Proficient*, by sorting the MAP-As into two piles: those they felt represented below proficient performance and those they felt represented performance that was proficient or above. Once the MAP-As were sorted into two piles, they then sorted each of those piles into two piles, starting with the subset of MAP-As they had classified as below proficient. Each of these sorting tasks was done in two rounds; after the two rounds were completed for all three cuts, Round 3 was completed simultaneously for all three cuts.

### 2.2.1 Discuss Achievement Level Descriptors

The first step in the process, once the panelists convened into their grade groups, was to discuss the Achievement Level Descriptors. This important step of the process was designed to ensure that panelists thoroughly understood the needed knowledge, skills, and abilities for portfolios to be classified as *Below Basic*, *Basic*, *Proficient*, and *Advanced*. Panelists began by reviewing the descriptors individually and then discussed them as a group, clarifying each level and coming to consensus as to the definitions of each. Bulleted lists of characteristics for each level were generated based on the group discussion and posted in the room for panelists to refer to during Round 1.

### 2.2.2 Round 1 & 2 : Middle Cut Judgments

In the first round, panelists worked individually with the ALDs, the rating form for the middle cut, and the set of MAP-As ordered from easiest to most difficult by total score. Each set of MAP-As consisted of approximately 35 portfolios (34 in grade 5, 36 in grade 8, and 35 in grade 11), with two portfolios for each observed score ranging from the minimum observed

score to the maximum possible score (22). For each portfolio, the panelists considered the skills and abilities demonstrated by a student, and decided which performance level was the best match for each portfolio.

The panelists began the rating process by individually reviewing the set of MAP-As, beginning with the first (the lowest scoring MAP-A in the set), then every fifth MAP-A after that up through the highest scoring MAP-A. This step enabled panelists to familiarize themselves with MAP-As across the full range of performance represented and also to narrow in on the set of MAP-As they felt was near the cut between *Basic* and *Proficient*. Once they identified the subset of MAP-As around the *Basic* and *Proficient* cut, they reviewed all of them in the subset, sorting them into the two piles. All of the MAP-As below their chosen subset were placed into the below proficient pile, and all those above were placed into the proficient or above pile. This allowed the panelists to separate the MAP-As into two piles without being overwhelmed by having to review all of them. Panelists were told that they would have multiple opportunities later in the process to move MAP-As between piles.

Once the panelists were finished working their way through the portfolios individually, without consulting with their colleagues, they completed the rating form, recording their ratings for each portfolio in the "Round 1" column of the rating form. While the portfolios were presented in order of total score, panelists were not required to rate them in strictly increasing order. Instead, panelists were encouraged to take a holistic look at the *portfolio*, rather than making a judgment based primarily on the ordering of the portfolios.

Panelists were given the following materials:

- Administration Manual to be used as a reference tool as needed
- MAP-As that represented the possible range of scores
- Rating Form – Middle Cut

Prior to beginning the group discussion, and using a show of hands, the facilitator recorded how many panelists placed each portfolio into each performance level on chart paper. Starting with the first portfolio for which there was disagreement as to how it should be categorized, the panelists began discussing the categorization of the portfolios according to their initial ratings. Panelists were encouraged both to share their own point of view as well as to listen to the thoughts of their colleagues. The goal was to allow each panelist the opportunity to explain why he or she sorted a particular MAP-A into one pile or the other. Facilitators made sure the panelists knew that the purpose of the discussion was not to come to consensus: at every point throughout the standard-setting process, panelists were asked to provide their own individual best judgment.

Once the discussions were complete, the panelists filled in the Round 2 column of their portfolios rating form, making any necessary adjustments to their Round 1 ratings.

### 2.2.3 Round 1 & 2: Lower Cut Judgments

Once Rounds 1 and 2 were completed for the middle cut, the panelists set the pile of MAP-As they had categorized as proficient or above aside, and began reviewing the full set of MAP-As in their below proficient pile. The task was to separate that pile of MAP-As into two sub-groups, representing the lower two achievement levels: *Below Basic* and *Basic*. As with the middle cut, the task for the lower cut was done in two rounds and, after each round, each panelist's categorizations were recorded on the Lower Cut Rating Form. For the first round panelists recorded their initial individual judgments, then there was discussion on any portfolios where panelists were not in agreement. Panelists were then given the opportunity to record their Round 2 ratings. Panelists may or may not have made any adjustments to their Round 1 ratings.

### 2.2.4 Round 1 & 2: Upper Cut Judgments

In this step, the panelists separated the pile of proficient or above MAP-As into an additional two piles representing the upper two achievement levels: *Proficient* and *Advanced.* As with the previous two cuts, the ratings were done in two rounds and each panelist recorded his/her Round 1 and Round 2 judgments on the Upper Cut Rating Form.

### 2.2.5 Tabulation of Round 2 Results

After all panelists had completed their individual ratings, Measured Progress staff calculated the mean cut-points for the group based on the Round 2 ratings. (The full Round 2 ratings can be found in Appendix I). Cuts were calculated using SAS statistical software by first determining each panelist's individual cuts using logistic regression (PROC LOGISTIC), then averaging across panelists to get the overall cuts. In statistics, logistic regression is a model used for prediction of the probability of occurrence of an event by fitting data to a logistic curve. In standard setting, an event consists of a panelist's classification of a portfolio. Each panelist classified each portfolio into an achievement level. By setting up dichotomies, denoting whether a portfolio is classified below or above each category, a logistic curve can be established. This logistic curve essentially represents the empirical relationship among the total score of each portfolio and a panelist's ratings. The inflection point of the logistic curve corresponds to an estimate of the panelists cut point. For each panelist, a logistic curve was fit for each cut point (*Below Basic/Basic*, *Basic/Proficient*, and *Proficient/Advanced*) and the estimates for each cut point were averaged across panelists.

Finally, impact data were calculated, consisting of the percentage of students who fell into each performance level based on the group mean Round 2 ratings. A psychometrician shared the percent of students who fell in each performance level with the group to assist them in their

group discussion and Round 3 ratings. The psychometrician also informed panelists which portfolios the mean cut scores fell between. Panelists were not given the raw score range of the performance levels, as this information often leads to panelists re-scoring the portfolios. Please note that participants were only shown the Round 2 results for their own grade. The Round 2 results are outlined in Table 5.

**Table 5: Round Two Results**

| Grade | Achievement Level | Mean Cut | Standard Error | Raw Score | | Percent of Students |
|---|---|---|---|---|---|---|
| | | | | Min | Max | |
| 5 | Below Basic | N/A | N/A | 0 | 14 | 54.7 |
| | Basic | 14.41 | 0.25 | 15 | 17 | 3.4 |
| | Proficient | 17.67 | 0.39 | 18 | 21 | 18.8 |
| | Advanced | 21.56 | 0.01 | 22 | 22 | 23.1 |
| 8 | Below Basic | N/A | N/A | 0 | 8 | 23.0 |
| | Basic | 9.00 | 0.15 | 9 | 14 | 27.4 |
| | Proficient | 14.67 | 0.23 | 15 | 21 | 30.1 |
| | Advanced | 21.69 | 0.36 | 22 | 22 | 19.5 |
| 11 | Below Basic | N/A | N/A | 0 | 12 | 50.2 |
| | Basic | 12.14 | 0.68 | 13 | 16 | 4.8 |
| | Proficient | 16.54 | 0.20 | 17 | 20 | 25.1 |
| | Advanced | 20.31 | 0.13 | 21 | 22 | 19.9 |

The mean panelist cut score and the spread or dispersion of the panelist cut scores are outlined in columns three and four, respectively. The mean panelist cut score gives precise information about where each cut was placed between its adjacent raw score points. The mean scores are rounded up to the nearest whole number to obtain the minimum raw score required to be classified in each achievement level. It is for this reason that an mean cut is not calculated for *Below Basic*: Examinees simply need to obtain a score of 0 to be classified as below basic. The percent of students classified in each achievement level is displayed in the final column of Table 5. For example, in Grade 5, 54.7% of students scored between zero and 14.

### 2.2.6 Round 3 Judgments

Once the panelists completed their Round 2 ratings, the facilitator once again asked for a show of hands and tallied the number of panelists who categorized each portfolio into each performance level on chart paper. As in Round 2, starting with the first portfolio for which there was disagreement as to its categorization, the panelists discussed their rationale for how they rated the Round 2 portfolios. Again, the purpose of the discussion was for the panelists to benefit from the points of view of their colleagues, not to come to consensus about the ratings.

Panelists were also asked to include the impact data (percent of students classified in each category) as part of their discussion. In presenting the impact data, the psychometrician explained to the panelists that its purpose was to provide a "reasonableness check," and that they should resist letting it influence their decisions in isolation. Instead, if any of the percentages seemed too high or too low, they were told to return to the assessment and to the Achievement Level Descriptors, and consider whether they needed to make adjustments to their Round 2 ratings.

Once the discussions had been completed, the panelists recorded their ratings in the Round 3 rating sheet and the sheets were submitted for data analysis. The results of the panelists' Round 3 ratings are outlined in Table 6. The full panelist ratings for Rounds 2 and 3 can be found in Appendix I.

**Table 6: Round Three Results**

| Grade | Achievement Level | Mean Cut | Standard Error | Raw Score | | Percent of Students |
|---|---|---|---|---|---|---|
| | | | | Min | Max | |
| 5 | Below Basic | N/A | N/A | 0 | 13 | 53.9 |
| | Basic | 13.02 | 0.26 | 14 | 17 | 4.2 |
| | Proficient | 17.67 | 0.39 | 18 | 21 | 18.8 |
| | Advanced | 21.56 | 0.01 | 22 | 22 | 23.1 |
| 8 | Below Basic | N/A | N/A | 0 | 8 | 23.0 |
| | Basic | 8.97 | 0.20 | 9 | 15 | 27.7 |
| | Proficient | 15.24 | 0.38 | 16 | 21 | 29.8 |
| | Advanced | 21.58 | 0.17 | 22 | 22 | 19.5 |
| 11 | Below Basic | N/A | N/A | 0 | 10 | 34.5 |
| | Basic | 10.61 | 0.43 | 11 | 16 | 20.5 |
| | Proficient | 16.54 | 0.20 | 17 | 20 | 25.1 |
| | Advanced | 20.35 | 0.13 | 21 | 22 | 19.9 |

A graphical display of the results across grades is also provided in Figures 1 and 2. The percent of students in each performance level, based on the panelist recommendations is outlined in Figure 1, while the proportion of the total score that each performance level represents is outlined in Figure 2.

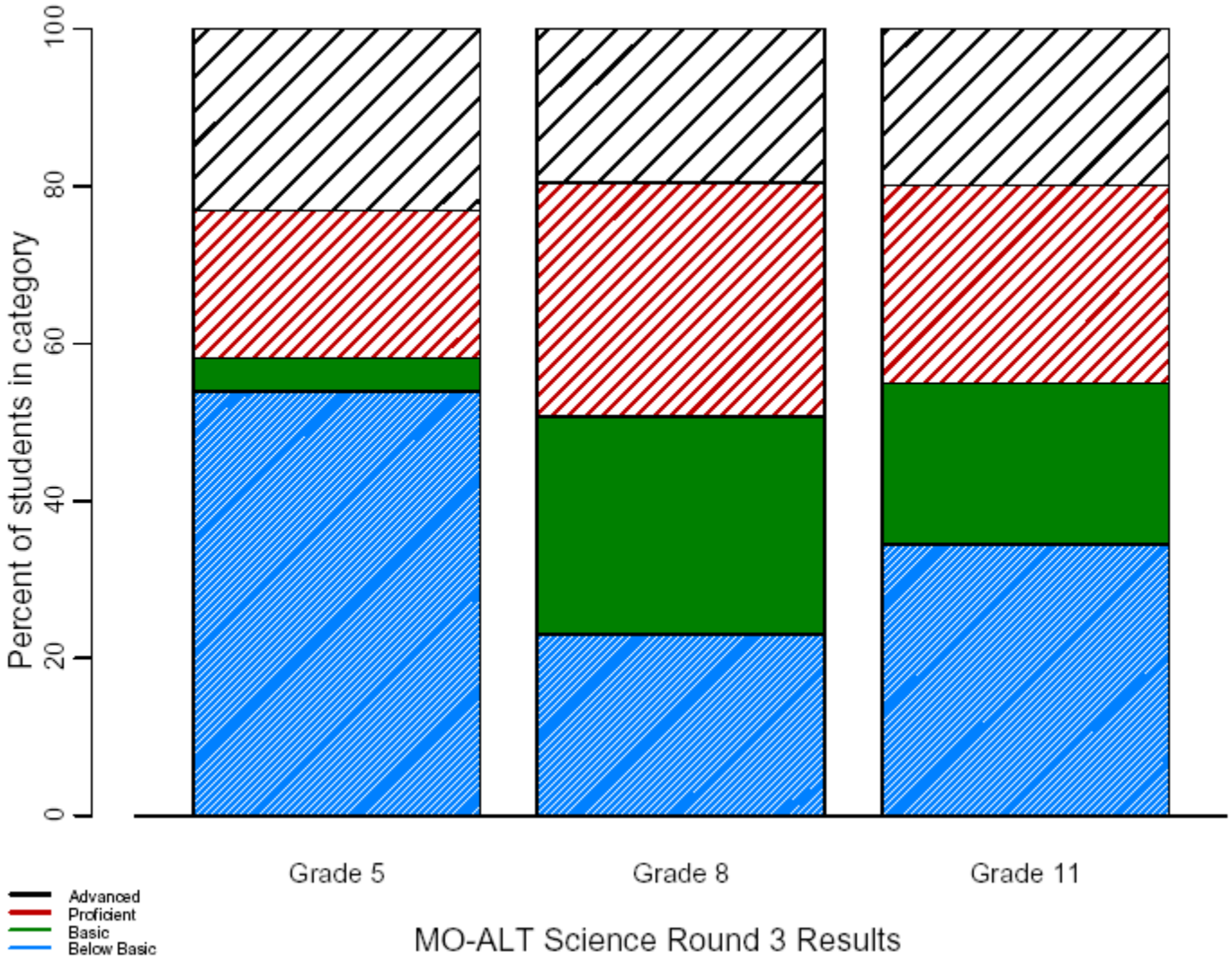


Figure 1: The percent of students falling at each achievement level

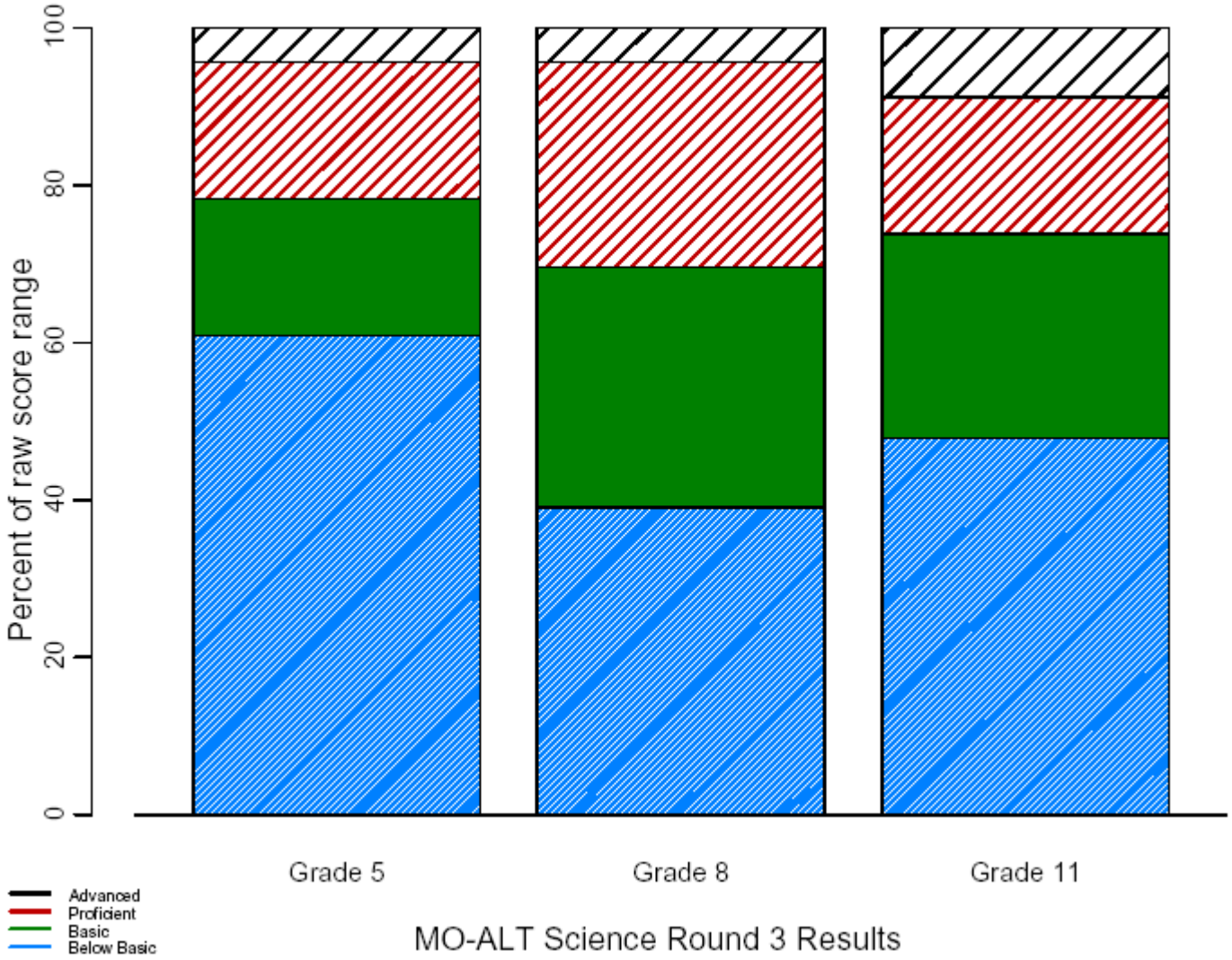


Figure 2: The percent of total raw score range for each achievement level

### 2.2.7 Recommendations for Modifications to ALDs

After completing Round 3, the panelists were given an opportunity to provide feedback on the Achievement Level Descriptors. Panelists were asked to focus on providing language that is clearer and more teacher- and parent-friendly. Panelists were informed that the suggestions they made were just recommendations and that they may or may not be implemented by DESE. The descriptor recommendations provided by the panelists are included in Appendix H.

### 2.2.8 Complete the Evaluation

As the last step in the standard-setting process, panelists in all three groups anonymously completed an evaluation form. A copy of the evaluation is presented as Appendix D, and the results of the evaluations are presented as Appendix I. Further discussion about some of the results can be found in section 3.1.

# 3. TASKS COMPLETED AFTER THE STANDARD-SETTING MEETING

Upon conclusion of the standard-setting meeting, several important tasks were completed. These tasks centered on reviewing the standard-setting meeting and addressing anomalies that may have occurred in the process or in the results and making any final revisions or adjustments.

## 3.1 Analysis and Review of Panelists' Feedback

Upon completion of the evaluation forms, panelists' responses were reviewed. This review did not reveal any anomalies in the standard-setting process or indicate any reason that a particular panelist's data should not be included when the final cut-points were calculated. It appeared that all panelists understood the rating task and attended to it appropriately.

The results of the evaluations for each of the three panels were somewhat mixed. Some of the panelists made comments about not feeling that they understood the process until the first afternoon or the second day of the process. It appears, based on the conversations that took place in the small groups, that some of the misunderstanding about the process had more to do with the portfolios that panelists were asked to look at and rate. Not all of the portfolios fell neatly into one of the Achievement Level Descriptors. This was especially true of the lower scoring portfolios with the lowest total raw scores. In this case many of these raw scores came about from one entry being unscorable and the other entry being scored. Panelists discussed how this should impact their decisions. The one scorable entry taken by itself met a higher Achievement Level Descriptor, however the fact that half of the required evidence was unscorable had to be factored in for a final decision by each panelist. During these types of conversations staff from

DESE, the Assessment Resource Center and Measured Progress were brought into the room to help panelists get to a place where they felt they could continue with the process.

When taking a look at the overall process questions, the factors that were used to make decisions and the overall feeling by panelists as to whether or not they had placed the cuts correctly it appears that the majority of panelists were comfortable with the standard setting process. Panelists were asked to respond to their overall impression of the process used for setting the science standards. The majority of panelists, 67% felt the overall process was good or very good, 23% were unsure and 9% (3 panelists) felt it was poor or very poor. Seventy-seven percent of the panelists found the assessment samples to be the most influential factor in setting standards, followed by their own experience in the field (65%). Eighty-nine percent of the panelists felt that the discussion with other panelists was useful or very useful. Overall when asked whether or not they felt that the cut scores their panel had set were correctly placed 71% felt they were probably or definitely placed correctly, 23% were unsure and 6 % (or 2 panelists) felt they were probably or definitely not correctly placed.

The above results have been somewhat typical in standard setting activities for science alternate assessments. As a whole, many participants and educators have had difficulty with the measurement of science content. This issue tends to be further exacerbated in alternate assessments. Complete results of the evaluations, presented for all groups combined, and by grade level, are provided in Appendix I.

## 3.2 Preparation of Recommended Cut Scores

The results of the June standard setting activities for the Missouri Assessment Program-Alternate (MAP-A) Science assessment raised a few areas of concern. First, the Grade 5 and 8 panelists set the *Proficient/Advanced* cut at 22, the maximum possible score. This meant that a

perfect score was required to be classified as *Advanced*. It is not believed that this was the panelists' intention. At no time were the panelists presented with the raw score cut points or the raw score ranges of the achievement levels. They were provided with the location of the cut points, in relation to the portfolios that they fell between. In Grades 5 and 8, the panelist placed the *Proficient/Advanced* cut so that the two highest portfolios (both of which had a perfect score) were classified as *Advanced*. Panelists were also provided with the percent of students that would be classified in each performance level. The percent of students classified as *Advanced* was quite high for all three grades. None of the impact data provided any indication that a perfect score was required to be classified as *Advanced*. Second, the Grade 5 panelists set the *Below Basic/Basic* and *Basic/Proficient* cuts in such a way that only four percent of the students who took the assessment were classified as *Basic* and almost 60% of students were classified below proficient. The Grade 5 panelists did not seem to be concerned about this distribution, despite efforts of the on-site psychometrician, DESE representative, and facilitator. In contrast, the panelists in Grade 11, who were faced with a similar issue after the presentation of Round 2 impact data (3.4% of the students were classified as Basic), did incorporate the information and adjusted the placement of the cut scores in Round 3. After careful consideration, and discussion with DESE staff, it was determined that the panelist cut scores should be smoothed across grades.

According to the achievement level descriptors, the definitions of *Below Basic*, *Basic*, *Proficient*, and *Advanced* are consistent across grade level. The differences in the descriptors are based on the different Science Strands that are assessed at each grade level. The correspondence of the achievement level descriptors coupled with the small range of possible score points and the desirability of having similar score patterns across grades suggests that similar cuts should be

established for all grade levels. Because the raw score is our best means of linking the scales across the grades, the same raw-score cuts were established for each grade. This was achieved by averaging the Round 3 mean panelist cut scores across grades. For example, the mean Round 3 panelist cut scores for the *Basic/Proficient* Science cuts were 17.67, 15.24, and 16.54 in grades 5, 8, and 11, respectively (Table 6). The mean of these scores is 16.48. This corresponds to an operational *Basic/Proficient* raw score cut of 17 (i.e., a student must receive a score of 17 or higher in order to be classified as *Proficient*). It is worthwhile noting that the recommended cut is rounded for operational use, after the panelist recommendations have been averaged across grades. An mean cut score across grades was calculated for the *Below Basic/Basic* cut and the *Basic/Proficient* cut. A summary of the Round 3 mean panelist cuts and the mean of these cuts is outlined in Table 7.

**Table 7: A Summary of Round 3 and Smoothed Cuts.**

| Grade | Round 3 | | | Smoothed | |
|---|---|---|---|---|---|
| | Grade 05 | Grade 08 | Grade 11 | Mean | Operational |
| Below Basic/Basic | 13.02 | 8.97 | 10.61 | 10.87 | 11 |
| Basic/Proficient | 17.67 | 15.24 | 16.54 | 16.48 | 17 |
| Proficient/Advanced | 21.56 | 21.58 | 20.35 | 21.16 | 22 |

Unfortunately, averaging the three *Proficient/Advanced* cuts (21.56, 21.58, and 20.35 for Grades 5, 8, and 11, respectively) led to an operational cut score of 22. Averaging the Round 3 results did not eliminate the need for a perfect score to be classified as advanced. After much discussion with the Department, it was determined, from a policy standpoint that "perfection" should not be required to be classified as advanced. Consequently, it was decided that the Round

3 Grade 11 results for the *Proficient/Advanced* cut would be applied to the other two grades. The *Proficient/Advanced* cut was set at 21 for all three grades.

The result of the smoothed cuts, including raw score ranges and impact data are presented in Table 8. A graphical display of the smoothed results across grades is also provided in Figures 3 and 4. The percent of students in each performance level, based on the panelist recommendations is outlined in Figure 3, while the proportion of the total score that each performance level represents is outlined in Figure 4.

**Table 8: Final Results**

| Grade | Achievement Level | Mean Cut | Raw Score | | Percent of Students |
|---|---|---|---|---|---|
| | | | Min | Max | |
| 5 | Below Basic | N/A | 0 | 10 | 35.7 |
| | Basic | 10.87 | 11 | 16 | 21.0 |
| | Proficient | 16.48 | 17 | 20 | 14.9 |
| | Advanced | 20.35 | 21 | 22 | 28.4 |
| 8 | Below Basic | N/A | 0 | 10 | 36.6 |
| | Basic | 10.87 | 11 | 16 | 15.6 |
| | Proficient | 16.48 | 17 | 20 | 22.0 |
| | Advanced | 20.35 | 21 | 22 | 25.7 |
| 11 | Below Basic | N/A | 0 | 10 | 34.5 |
| | Basic | 10.87 | 11 | 16 | 20.5 |
| | Proficient | 16.48 | 17 | 20 | 25.1 |
| | Advanced | 20.35 | 21 | 22 | 19.9 |

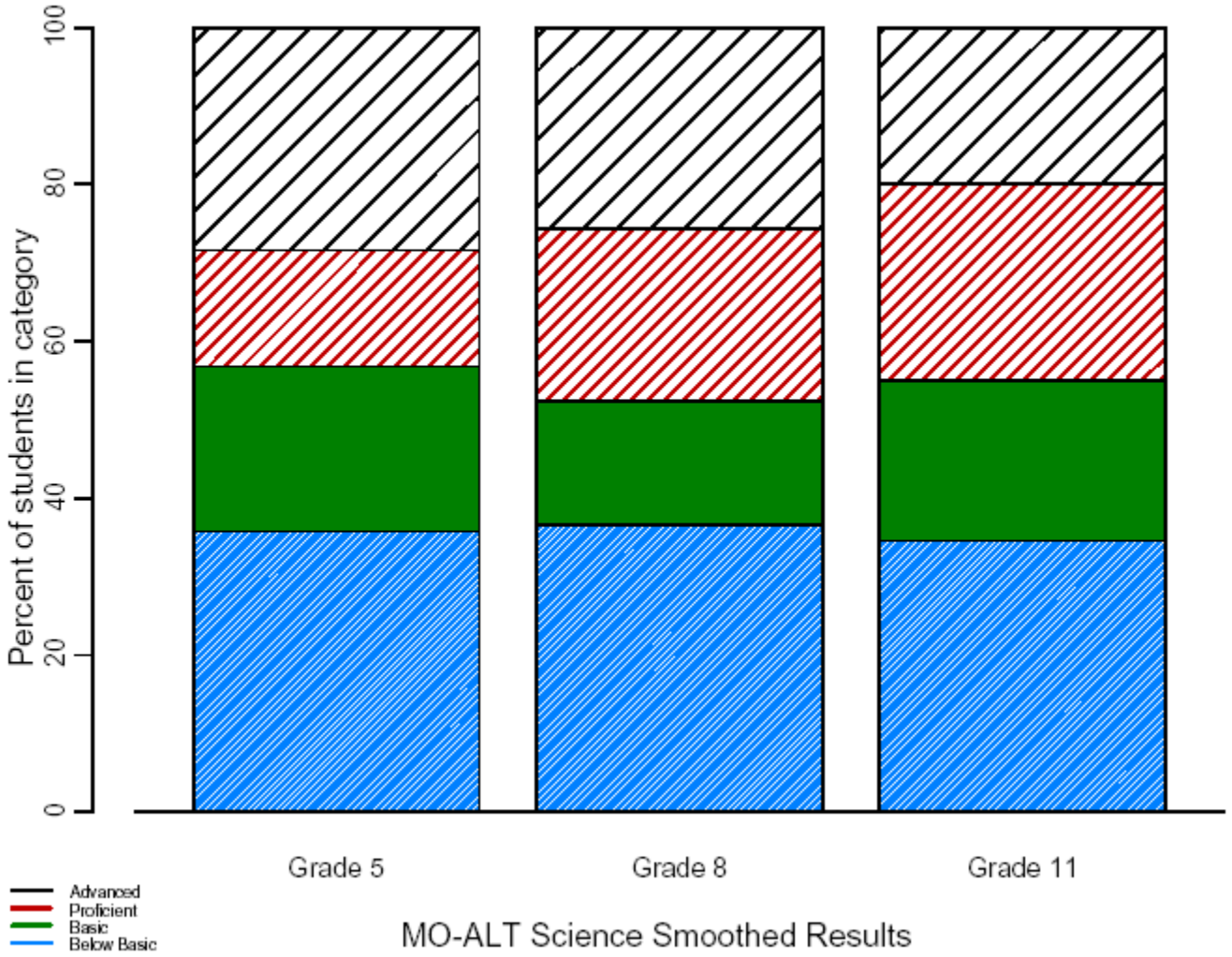


Figure 3: The percent of students falling at each achievement level

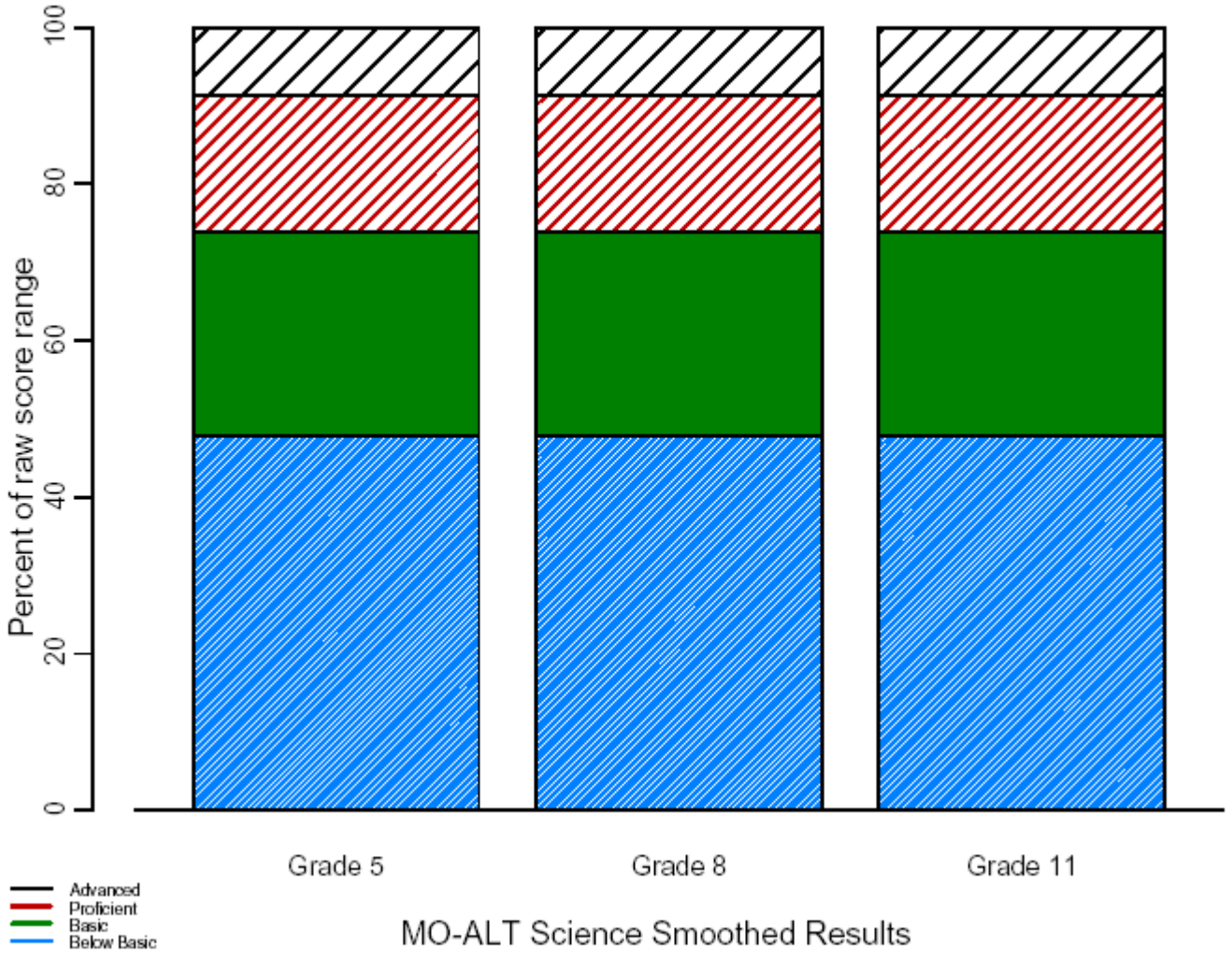


Figure 4: The percent of total raw score range for each achievement level

## 3.3 Preparation of Standard-Setting Report

Following final compilation of standard-setting results, Measured Progress prepared this report, which documents the procedures and results of the June 2008 standard-setting meeting in order to establish performance standards for the Missouri Assessment Program–Alternate in Science.

Experiences in other states, where science has been added to alternate assessments for the first time, show that many teachers are struggling with the science content and therefore the student samples that are available for setting science standards in the first year are not of the best quality. This is true of the samples that were available for standard setting in Missouri. Based on this issue and further conversations with DESE, Measured Progress recommends that a validation focus group be convened to review the science cuts in another year or two.

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# APPENDIX A: DRAFT ACHIEVEMENT LEVEL DESCRIPTORS

| Grade 5 | Science |
|---|---|
| **Below Basic** | Student has a minimal understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work may be loosely connected to the strands. Student likely requires extensive verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Basic** | Student has a fundamental understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work may be somewhat connected to the strands. Student likely requires frequent verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Proficient** | Student has a sound understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work may be connected to the strands and demonstrate application. Student likely requires some verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |
| **Advanced** | Student has a strong understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work may be closely connected to the strands and demonstrate strong application. Student likely requires minimal verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |

| Grade 8 | Science |
|---|---|
| **Below Basic** | Student has a minimal understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Properties and Principles of Matter and Energy, and Properties and Principles of Force and Motion. Student work may be loosely connected to the strands. Student likely requires extensive verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Basic** | Student has a fundamental understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Properties and Principles of Matter and Energy, and Properties and Principles of Force and Motion. Student work may be somewhat connected to the strands. Student likely requires frequent verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Proficient** | Student has a sound understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Properties and Principles of Matter and Energy, and Properties and Principles of Force and Motion. Student work may be connected to the strands and demonstrate application. Student likely requires some verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |
| **Advanced** | Student has a strong understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Properties and Principles of Matter and Energy, and Properties and Principles of Force and Motion. Student work may be closely connected to the strands and demonstrate strong application. Student likely requires minimal verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |

| Grade 11 | Science |
|---|---|
| **Below Basic** | Student has a minimal understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Processes and Interactions of the Earth's Systems and Composition and Structure of the Universe and the Motion of the Objects Within It. Student work may be loosely connected to the strands. Student likely requires extensive verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Basic** | Student has a fundamental understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Processes and Interactions of the Earth's Systems and Composition and Structure of the Universe and the Motion of the Objects Within It. Student work may be somewhat connected to the strands. Student likely requires frequent verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Proficient** | Student has a sound understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Processes and Interactions of the Earth's Systems and Composition and Structure of the Universe and the Motion of the Objects Within It. Student work may be connected to the strands and demonstrate application. Student likely requires some verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |
| **Advanced** | Student has a strong understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Processes and Interactions of the Earth's Systems and Composition and Structure of the Universe and the Motion of the Objects Within It. Student work may be closely connected to the strands and demonstrate strong application. Student likely requires minimal verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |

# APPENDIX B: AGENDA

# MISSOURI ASSESSMENT PROGRAM- ALTERNATE STANDARD SETTING
## SCIENCE
## June 3&4, 2008
## AGENDA

**TUESDAY, JUNE 3**

| | |
|---|---|
| 8:30 – 9:00 | Registration & Breakfast |
| 9:00 – 10:30 | Introduction, Overview, and Training of Standard Setting Process |
| 10:30 – 10:45 | Break |
| 10:45 – 12:00 | Move to Grade Level/Content Area Work Rooms |
| 12:00 – 12:45 | Lunch |
| 12:45 – 2:30 | Continue in Work Rooms |
| 2:30 – 2:45 | Break |
| 2:45 – 4:00 | Continue in Work Rooms |
| 4:00 | Adjourn |

**WEDNESDAY, JUNE 4**

| | |
|---|---|
| 8:00 – 8:30 | Breakfast |
| 8:30 – 10:30 | Move to Grade Level/Content Area Work Rooms |
| 10:30 – 10:45 | Break |
| 10:45 – 12:00 | Continue in Work Rooms |
| 12:00 – 12:45 | Lunch |
| 12:45 – 2:30 | Continue in Work Rooms |
| 2:30 – 2:45 | Break |
| 2:45 – 4:00 | Continue in Work Rooms |
| 4:00 | Adjourn |

# APPENDIX C: RATING FORMS

**Complete this form FIRST** **ID Number: _____**

**MAP-A Science Grade 05**
**Rating Form – Middle Cut**

| | Round 1 | | Round 2 | |
|---|---|---|---|---|
| | **Below Proficient** | **Proficient or Above** | **Below Proficient** | **Proficient or Above** |
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**Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms**

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form SECOND** **ID Number: _____**

## MAP-A Science Grade 05
## Rating Form – Lower Cut

| | Round 1 | | | Round 2 | | |
|---|---|---|---|---|---|---|
| | **BB** | **B** | **Proficient or Above** | **BB** | **B** | **Proficient or Above** |
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**Transcribe your Round 2 "Proficient or Above" Ratings from the Middle Cut Rating Form Here**

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form THIRD** **ID Number: _____**

**MAP-A Science Grade 05**
**Rating Form – Upper Cut**

| | Round 1 | | | Round 2 | | |
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| | **Below Proficient** | **P** | **A** | **Below Proficient** | **P** | **A** |
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**Transcribe your Round 2 "Below Proficient" ratings from the Middle Cut Rating Form here**

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form FIRST** **ID Number: _____**

**MAP-A Mathematics Science 05**
**Rating Form – All Cuts**

| | Round 3 | | | |
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| | **BB** | **B** | **P** | **A** |
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BB: *Below Basic*
B: *Basic*
P: *Proficient*
A: *Advanced*

**MAP-A Science Grade 08**
**Rating Form – Middle Cut**

**Complete this form FIRST** **ID Number: _____**

| | Round 1 | | Round 2 | |
|---|---|---|---|---|
| | **Below Proficient** | **Proficient or Above** | **Below Proficient** | **Proficient or Above** |
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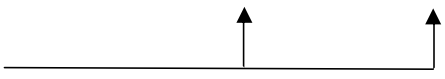
**Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms**



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form SECOND** **ID Number: _____**

**MAP-A Science Grade 08**
**Rating Form – Lower Cut**

| | Round 1 | | | Round 2 | | |
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| | **BB** | **B** | **Proficient or Above** | **BB** | **B** | **Proficient or Above** |
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**Transcribe your Round 2 "Proficient or Above" Ratings from the Middle Cut Rating Form Here**

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form THIRD** **ID Number: _____**

**MAP-A Science Grade 08**
**Rating Form – Upper Cut**

| | Round 1 | | | Round 2 | | |
|---|---|---|---|---|---|---|
| | **Below Proficient** | **P** | **A** | **Below Proficient** | **P** | **A** |
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**Transcribe your Round 2 "Below Proficient" ratings from the Middle Cut Rating Form here**

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form FIRST** **ID Number: _____**

**MAP-A Mathematics Science 08**
**Rating Form – All Cuts**

| | Round 3 | | | |
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| | **BB** | **B** | **P** | **A** |
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BB: *Below Basic*
B: *Basic*
P: *Proficient*
A: *Advanced*

**Complete this form FIRST** **ID Number: _____**

**MAP-A Science Grade 11**
**Rating Form – Middle Cut**

| | Round 1 | | Round 2 | |
|---|---|---|---|---|
| | **Below Proficient** | **Proficient or Above** | **Below Proficient** | **Proficient or Above** |
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**Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms**

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form SECOND** **ID Number: _____**

**MAP-A Science Grade 11**
**Rating Form – Lower Cut**

| | Round 1 | | | Round 2 | | |
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| | **BB** | **B** | **Proficient or Above** | **BB** | **B** | **Proficient or Above** |
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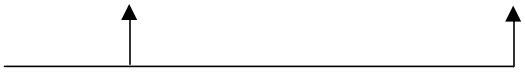
**Transcribe your Round 2 "Proficient or Above" Ratings from the Middle Cut Rating Form Here**



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form THIRD** **ID Number: _____**

**MAP-A Science Grade 11**
**Rating Form – Upper Cut**

| | Round 1 | | | Round 2 | | |
|---|---|---|---|---|---|---|
| | **Below Proficient** | **P** | **A** | **Below Proficient** | **P** | **A** |
| 1 | | | | | | |
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**Transcribe your Round 2 "Below Proficient" ratings from the Middle Cut Rating Form here**

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**Complete this form FOURTH** **ID Number: _____**

**MAP-A Mathematics Science 11**
**Rating Form – All Cuts**

| | Round 3 | | | |
|---|---|---|---|---|
| | **BB** | **B** | **P** | **A** |
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BB: *Below Basic*
B: *Basic*
P: *Proficient*
A: *Advanced*

# APPENDIX D: EVALUATION

## Science Standard Setting Panel
## Evaluation Form

Evaluation of the Standard setting Procedures for the Missouri Alternate Assessment

1. What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment? *(Circle one)*

   A. Very Good
   B. Good
   C. Unsure
   D. Poor
   E. Very Poor

2. How clear were you with the achievement level descriptors? *(Circle one)*

   A. Very Clear
   B. Clear
   C. Somewhat Clear
   D. Not Clear

3. How would you judge the length of time of this meeting for setting performance standards? *(Circle one)*

   A. About right
   B. Too little time
   C. Too much time

4. What factors influenced the standards you set? (For each, circle the most appropriate rating from 1=Not at all Influential to 5=Very Influential)

   A. The achievement level descriptors

| Not at all Influential | | Moderately Influential | | Very Influential |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

   B. The assessment samples

| Not at all Influential | | Moderately Influential | | Very Influential |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

   C. Other panelists

| Not at all Influential | | Moderately Influential | | Very Influential |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

D. My experience in the field

| Not at all Influential | | Moderately Influential | | Very Influential |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

E. Other (*please specify*_____)

| Not at all Influential | | Moderately Influential | | Very Influential |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

5. Do you believe the cut scores set by the panel are correctly placed?

A. Definitely Yes
B. Probably Yes
C. Unsure
D. Probably No
E. Definitely No

Please explain your answer:

_____

_____

_____

6. How could the standard setting process have been improved?

_____
_____
_____
_____
_____

For each statement below, please circle the rating that best represents your judgment.

7. The opening session was:

| Not at all Useful | | | | Very Useful |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

8. The achievement level descriptors were:

| Not at all Clear | | | | Very Clear |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

9. Providing additional details to the achievement level descriptors was:

| Not at all Useful | | | | Very Useful |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

10. The discussion with other panelists was:

| Not at all Useful | | | | Very Useful |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

11. The portfolio rating task was:

| Not at all Clear | | | | Very Clear |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

12. The impact data provided prior to the last round of ratings was:

| Not at all Useful | | | | Very Useful |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

## Additional Comments

13. Please provide any additional comments or suggestions about the standard setting process. Use extra paper if necessary.

# APPENDIX E: OPENING SESSION POWER POINTS

Slide 1

# Missouri Assessment Program Alternate (MAP-A) Science Standard Setting

Slide 2

## Who are MAP-A students?

To be eligible for the MAP-A, a student with a disability must meet the following criteria:

- The student has a demonstrated significant cognitive disability and adaptive behavioral skills. Therefore, the student has difficulty acquiring new skills, and skills must be taught in very small steps.
- The student does not keep pace with peers, even with the majority of students in special education, with respect to the total number of skills acquired.

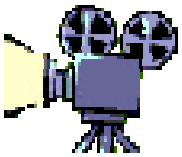
Slide 3

## Who are MAP-A students?

- The student's educational program centers on the application of essential skills to the Missouri Show-Me Standards.
- The IEP team, as documented in the IEP, does not recommend participation in the MAP subject area assessments or taking the MAP with accommodations.
- The student's inability to participate in the MAP subject-area assessments is not primarily the result of excessive absences; visual or auditory disabilities; or social, cultural, language, or economic differences.

Slide 4

## Video Clips



Slide 5

## What is the MAP-A?

The MAP-A is

- required by federal law;
- designed only for students with significant cognitive disabilities who meet age and participation criteria;
- administered at the same grade levels as students participating in Missouri's general assessment;

Slide 6

## What is the MAP-A?

- scored using the MAP-A Scoring Rubric to obtain student performance levels which are then used to determine reportable scores; and
- reflective of input from an instructional team, which may include teachers, physical therapists, speech therapists, occupational therapists, paraprofessionals, job coaches, parents or guardians, and the student, if appropriate.

Slide 7

## What is assessed?

| Content Area | Grade Focus | Title of Strand |
|---|---|---|
| Science | **PROCESS STRANDS** | |
| | Required at Grades 5, 8, and 11 | Strand 7: Scientific Inquiry **(IN)** |
| | Required at Grades 5, 8, and 11 | Strand 8: Impact of Science, Technology, and Human Activity **(ST)** |
| | **CONTENT STRANDS** | |
| | Required for Elementary Grade 5 | Strand 3: Characteristics and Interactions of Living Organisms **(LO)** |
| | Required for Elementary Grade 5 | Strand 4: Changes in Ecosystems and Interactions of Organisms with Their Environments **(EC)** |
| | Required for Middle School Grade 8 | Strand 1: Properties and Principles of Matter and Energy **(ME)** |
| | Required for Middle School Grade 8 | Strand 2: Properties and Principles of Force and Motion **(FM)** |
| | Required for High School Grade 11 | Strand 5: Processes and Interactions of the Earth's Systems (Geosphere, Atmosphere, and Hydrosphere) **(ES)** |
| | Required for High School Grade 11 | Strand 6: Composition and Structure of the Universe and the Motion of the Objects Within It **(UN)** |

Slide 8

## What is the design?

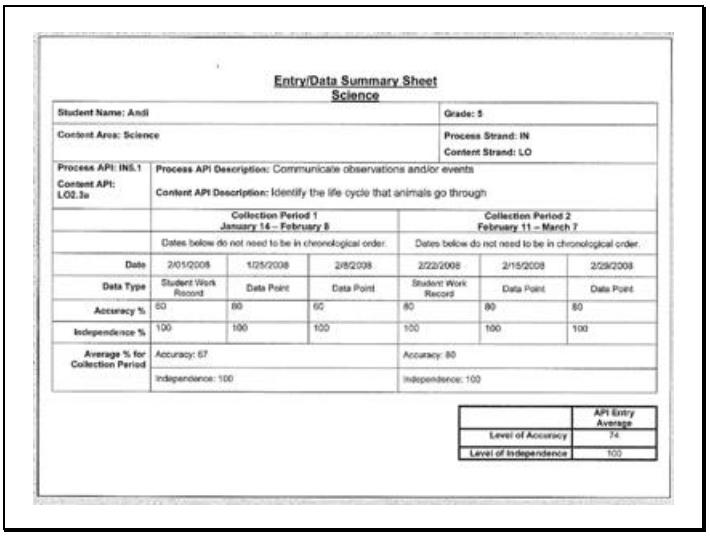
| **Science** | | | |
|---|---|---|---|
| Process Strand 7 and Content Strand | | Process Strand 8 and Content Strand | |
| Process API 1 | Content API 1 | Process API 2 | Content API 2 |
| Entry/Data Summary Sheet | | Entry/Data Summary Sheet | |
| Collection Period 1<br><br>Student Work Record | Collection Period 2<br><br>Student Work Record | Collection Period 1<br><br>Student Work Record | Collection Period 2<br><br>Student Work Record |

Slide 9

## What are the MAP-A requirements?

| Content | Description |
|---|---|
| Entry/Data Summary Sheet | Serves as a record of student performance on each API assessed.<br>The student's score for Level of Accuracy and Level of Independence for each API will be determined based on the percentages recorded on the Entry/Data Summary Sheet. |
| Student Work Records | Provides documentation of student work for each API assessed in both collection periods. Student Work Records should demonstrate the application of the API/s in a standards-based activity. You may show evidence of student work by:<br><br>• collecting student work samples such as worksheets, drawings, writings, journal entries, or projects; or<br><br>• observing the student and recording his or her performance. |

Slide 10

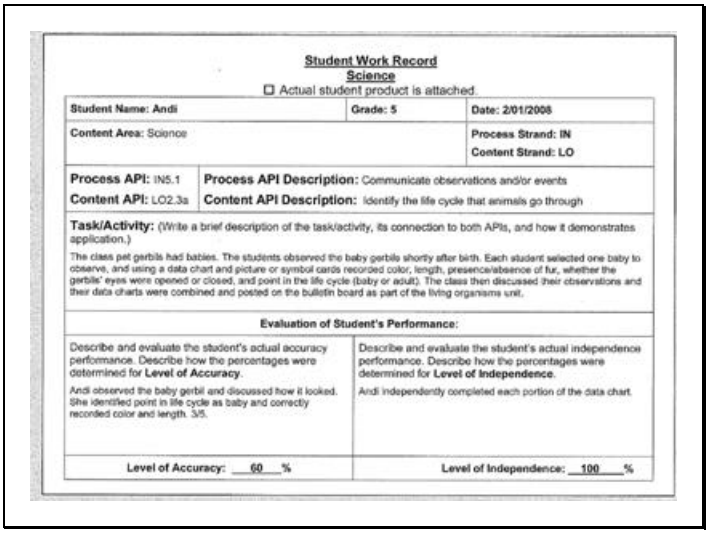


**Entry/Data Summary Sheet**
**Science**

| | | | | | | |
|---|---|---|---|---|---|---|
| **Student Name: Andi** | | | | **Grade: 5** | | |
| **Content Area: Science** | | | | **Process Strand: IN**<br>**Content Strand: LO** | | |
| **Process API: IN5.1**<br>**Content API: LO2.3a** | **Process API Description:** Communicate observations and/or events<br>**Content API Description:** Identify the life cycle that animals go through | | | | | |
| | **Collection Period 1**<br>**January 14 – February 8** | | | **Collection Period 2**<br>**February 11 – March 7** | | |
| | Dates below do not need to be in chronological order. | | | Dates below do not need to be in chronological order. | | |
| **Date** | 2/01/2008 | 1/25/2008 | 2/8/2008 | 2/22/2008 | 2/15/2008 | 2/29/2008 |
| **Data Type** | Student Work Record | Data Point | Data Point | Student Work Record | Data Point | Data Point |
| **Accuracy %** | 60 | 80 | 60 | 80 | 80 | 80 |
| **Independence %** | 100 | 100 | 100 | 100 | 100 | 100 |
| **Average % for Collection Period** | Accuracy: 67 | | | Accuracy: 80 | | |
| | Independence: 100 | | | Independence: 100 | | |

| | API Entry Average |
|---|---|
| **Level of Accuracy** | 74 |
| **Level of Independence** | 100 |

Slide 11



**Student Work Record**
**Science**
☐ Actual student product is attached.

| | | |
|---|---|---|
| **Student Name: Andi** | **Grade: 5** | **Date: 2/01/2008** |
| **Content Area:** Science | | **Process Strand: IN**<br>**Content Strand: LO** |

**Process API:** IN5.1 **Process API Description:** Communicate observations and/or events
**Content API:** LO2.3a **Content API Description:** Identify the life cycle that animals go through

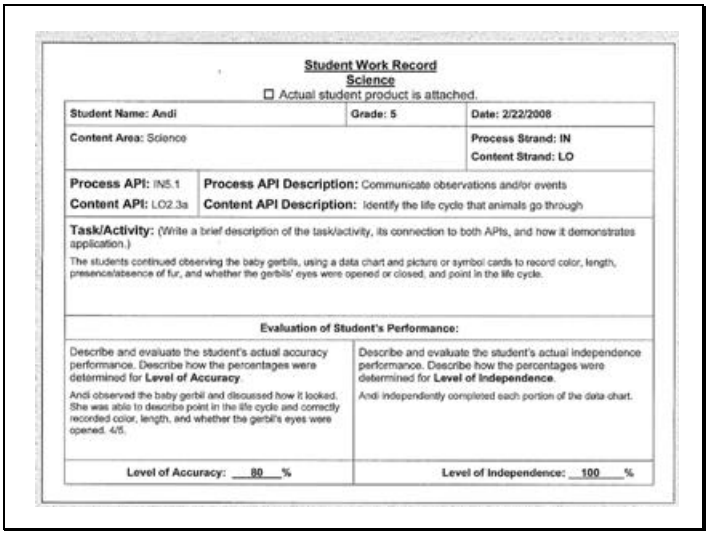
**Task/Activity:** (Write a brief description of the task/activity, its connection to both APIs, and how it demonstrates application.)

The class pet gerbils had babies. The students observed the baby gerbils shortly after birth. Each student selected one baby to observe, and using a data chart and picture or symbol cards recorded color, length, presence/absence of fur, whether the gerbils' eyes were opened or closed, and point in the life cycle (baby or adult). The class then discussed their observations and their data charts were combined and posted on the bulletin board as part of the living organisms unit.

**Evaluation of Student's Performance:**

| | |
|---|---|
| Describe and evaluate the student's actual accuracy performance. Describe how the percentages were determined for **Level of Accuracy**.<br>Andi observed the baby gerbil and discussed how it looked. She identified point in life cycle as baby and correctly recorded color and length. 3/5. | Describe and evaluate the student's actual independence performance. Describe how the percentages were determined for **Level of Independence**.<br>Andi independently completed each portion of the data chart. |
| **Level of Accuracy: 60 %** | **Level of Independence: 100 %** |

Slide 12



**Student Work Record**
**Science**
☐ Actual student product is attached.

| | | |
|---|---|---|
| **Student Name: Andi** | **Grade: 5** | **Date: 2/22/2008** |
| **Content Area:** Science | | **Process Strand: IN**<br>**Content Strand: LO** |

**Process API:** IN5.1 **Process API Description:** Communicate observations and/or events
**Content API:** LO2.3a **Content API Description:** Identify the life cycle that animals go through

**Task/Activity:** (Write a brief description of the task/activity, its connection to both APIs, and how it demonstrates application.)

The students continued observing the baby gerbils, using a data chart and picture or symbol cards to record color, length, presence/absence of fur, and whether the gerbils' eyes were opened or closed, and point in the life cycle.

**Evaluation of Student's Performance:**

| | |
|---|---|
| Describe and evaluate the student's actual accuracy performance. Describe how the percentages were determined for **Level of Accuracy**.<br>Andi observed the baby gerbil and discussed how it looked. She was able to describe point in the life cycle and correctly recorded color, length, and whether the gerbil's eyes were opened. 4/5. | Describe and evaluate the student's actual independence performance. Describe how the percentages were determined for **Level of Independence**.<br>Andi independently completed each portion of the data chart. |
| **Level of Accuracy: 80 %** | **Level of Independence: 100 %** |

Slide 13

## What does the MAP-A Assess?

- The MAP-A documents student learning directly connected to the Show-Me Standards through the Alternate Grade-Level Expectations (Alternate-GLEs) for students who are MAP-A eligible. The assessment has three criteria:
  - Level of Accuracy
  - Level of Independence
  - Connection to the Standards

Slide 14

## MAP-A Rubric

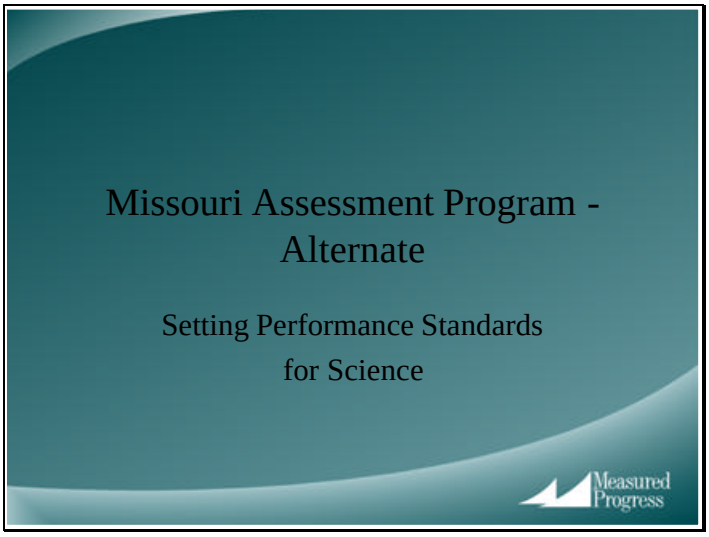
| SCORE | 4 | 3 | 2 | 1 | No Score |
|---|---|---|---|---|---|
| **Level of Accuracy** | Student performance of skills "based on Alternate Performance Indicators" demonstrates a high level of understanding of concepts. **76–100% Accuracy** | Student performance of skills "based on Alternate Performance Indicators" demonstrates some understanding of concepts. **51–75% Accuracy** | Student performance of skills "based on Alternate Performance Indicators" demonstrates a limited understanding of concepts. **26–50% Accuracy** | Student performance of skills "based on Alternate Performance Indicators" demonstrates a minimal understanding of concepts. **0–25% Accuracy** | Entry contains insufficient information to determine a score. |
| **Level of Independence** | Student requires minimal verbal, visual, and/or physical assistance to demonstrate skills and concepts. **76–100% Independence** | Student requires some verbal, visual, and/or physical assistance to demonstrate skills and concepts. **51–75% Independence** | Student requires frequent verbal, visual, and/or physical assistance to demonstrate skills and concepts. **26–50% Independence** | Student requires extensive verbal, visual, and/or physical assistance to demonstrate skills and concepts. **0–25% Independence** | Entry contains insufficient information to determine a score. |
| **Connection to the Standards** | | There is evidence of applying the Alternate Performance Indicator in two standards-based activities, one per collection period. | There is evidence of applying the Alternate Performance Indicator in at least one standards-based activity, one out of two collection periods. | There is some evidence of a connection to the Alternate Performance Indicator. | There is insufficient evidence of a connection to the Alternate Performance Indicator. |

Slide 15

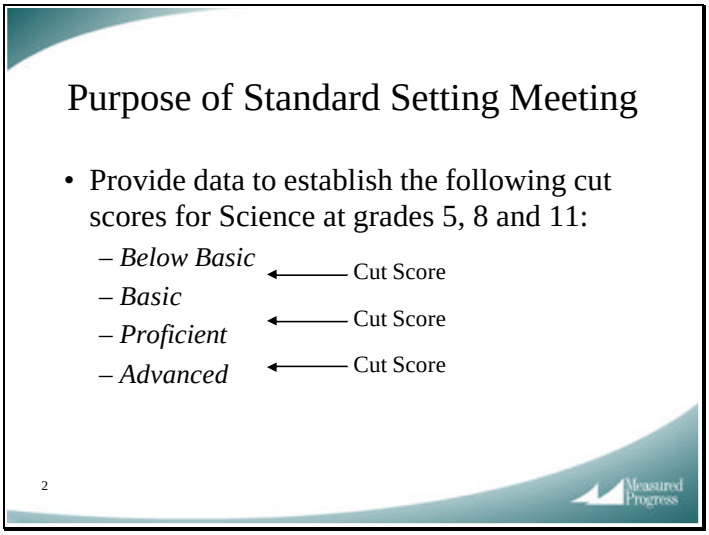
## Who scored the MAP-As?

- The Assessment Resource Center hired scorers in Missouri and provided training.
- DESE staff were present at the training and available as needed to answer questions.

Slide 1




Slide 2

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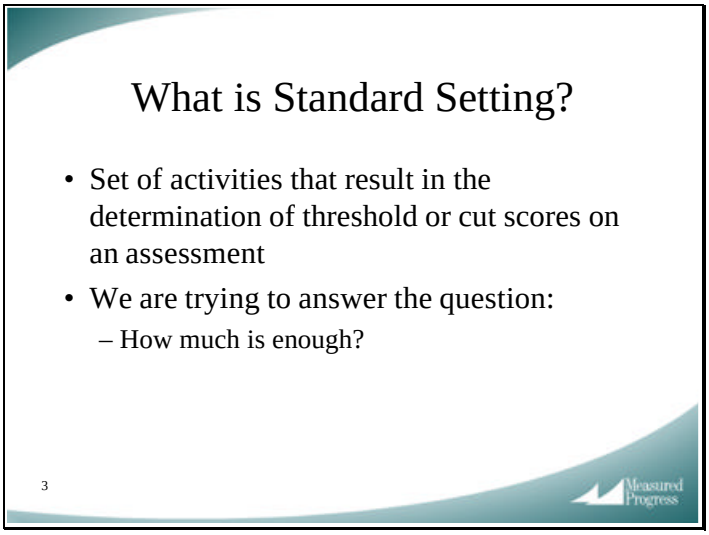

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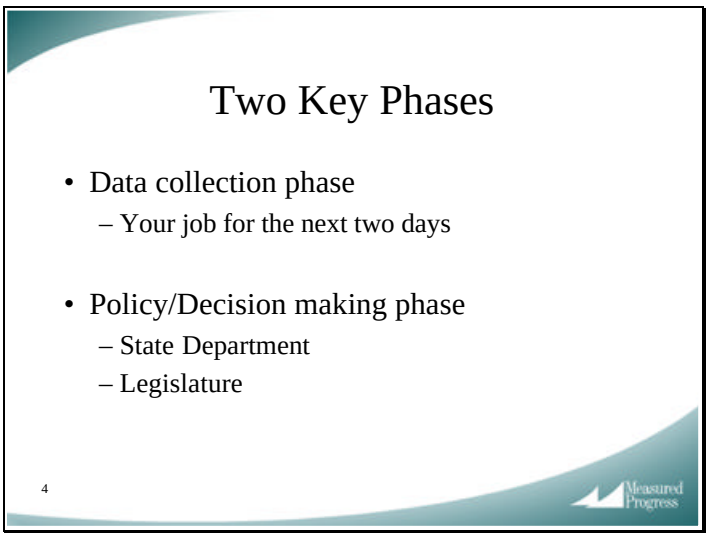


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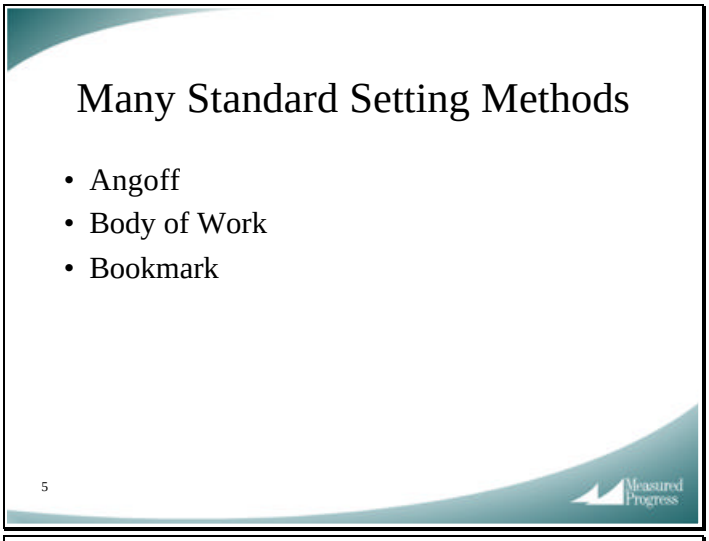


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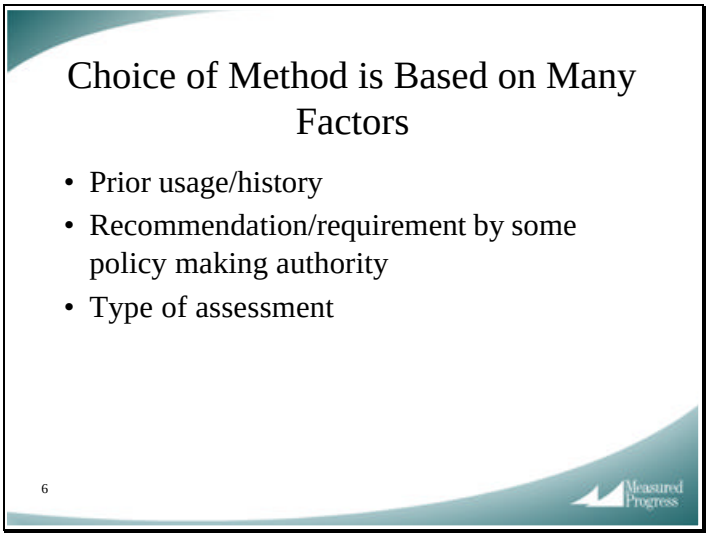

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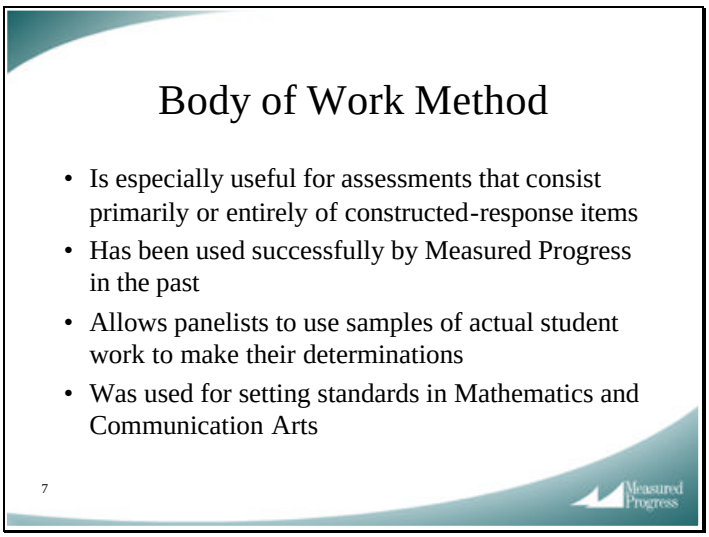


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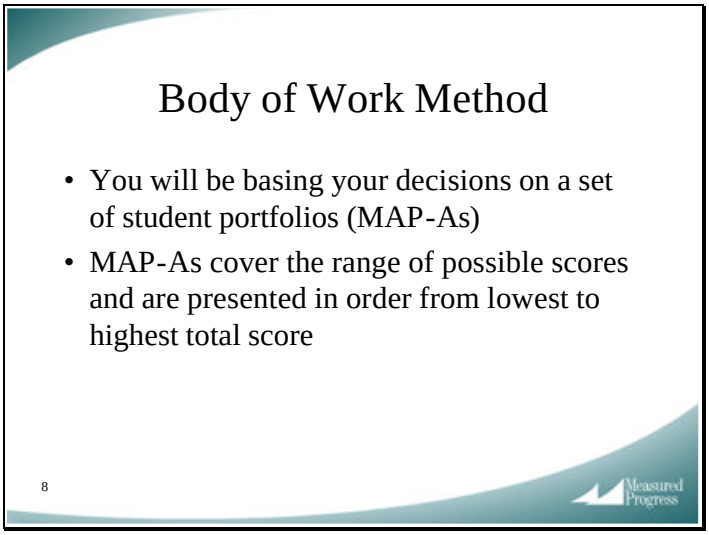


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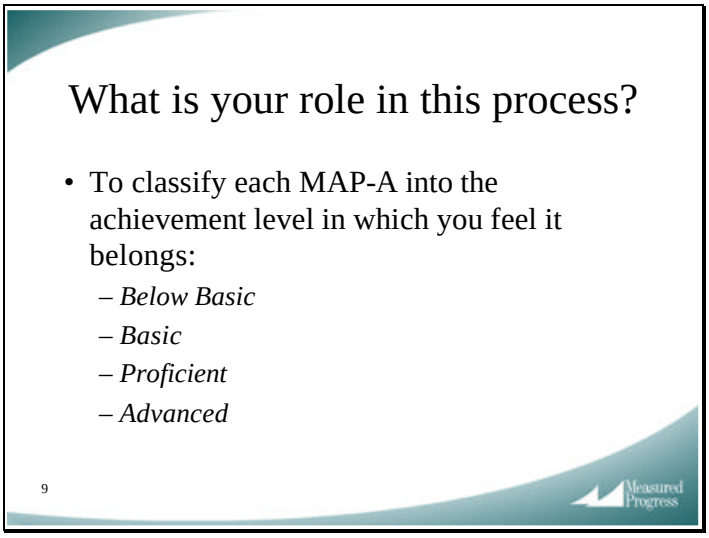

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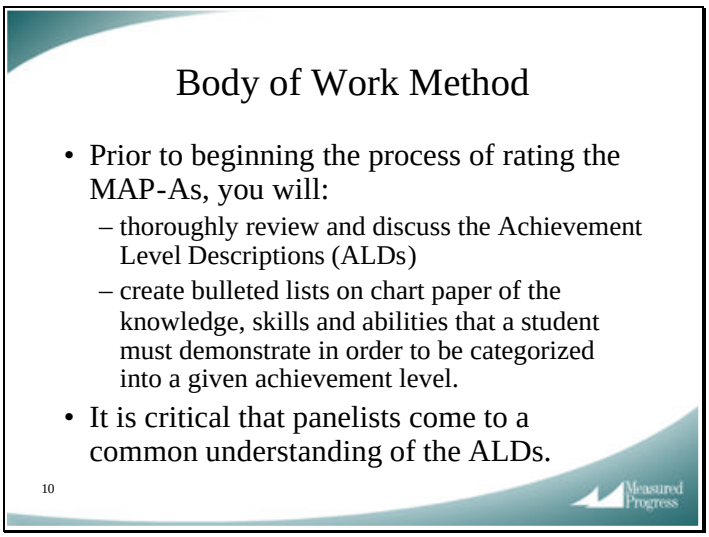


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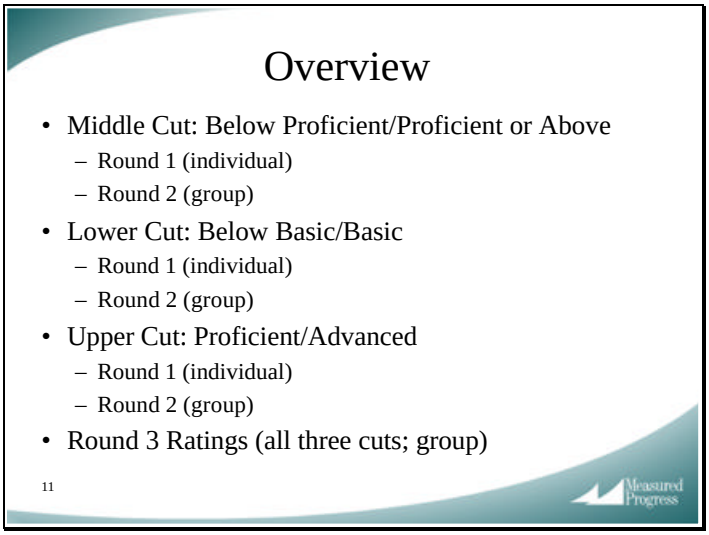


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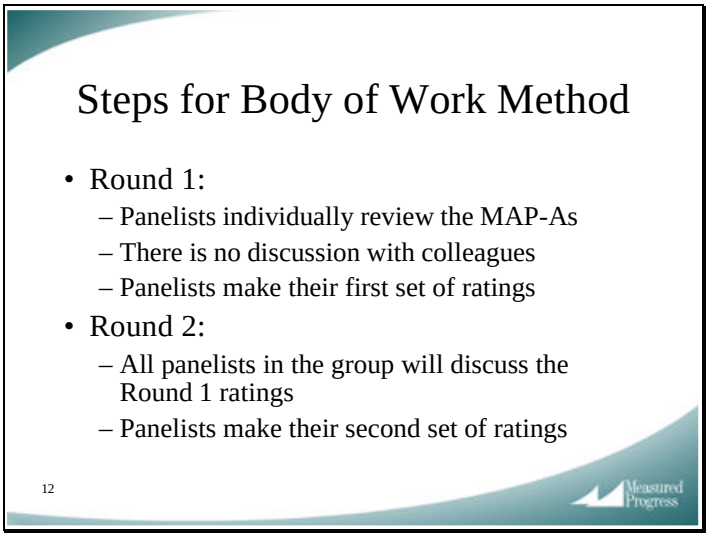

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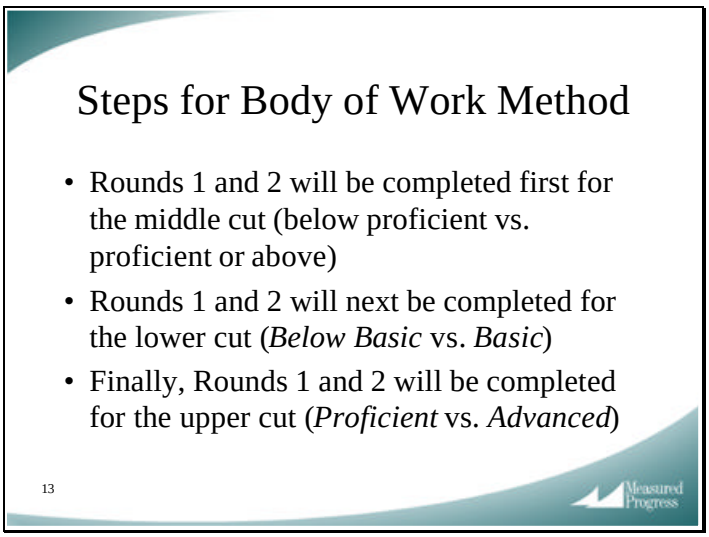


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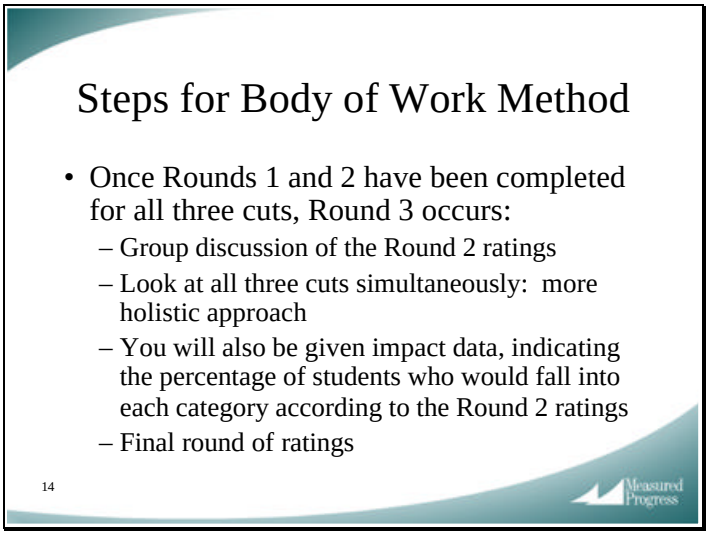


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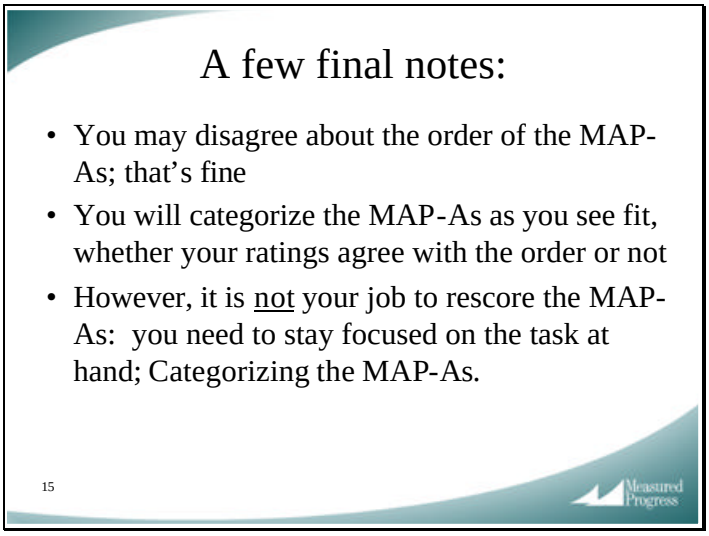

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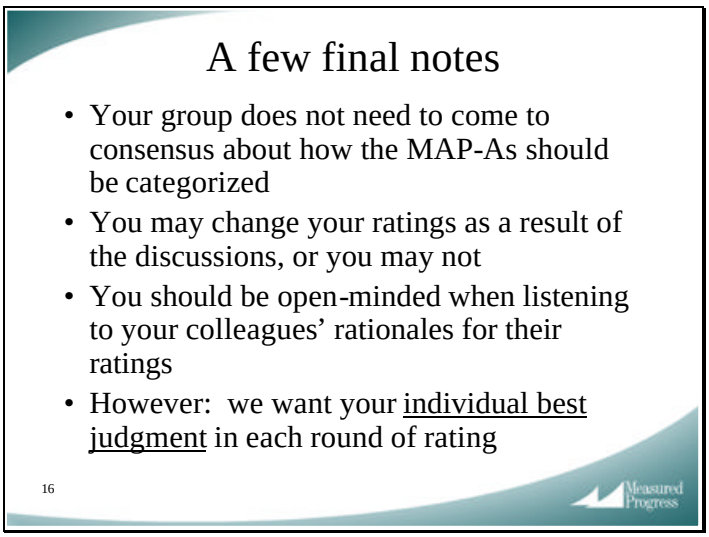


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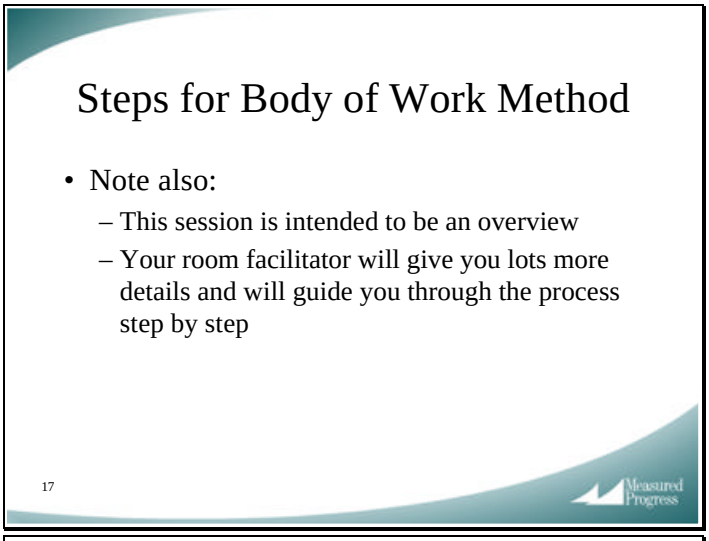


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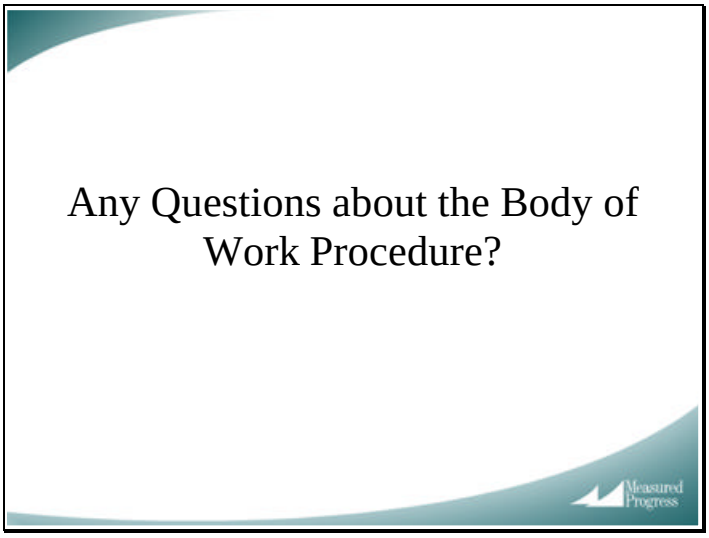

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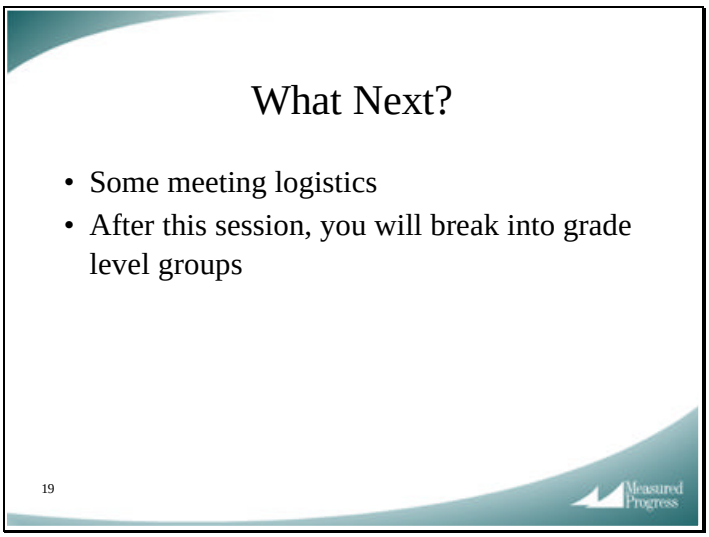
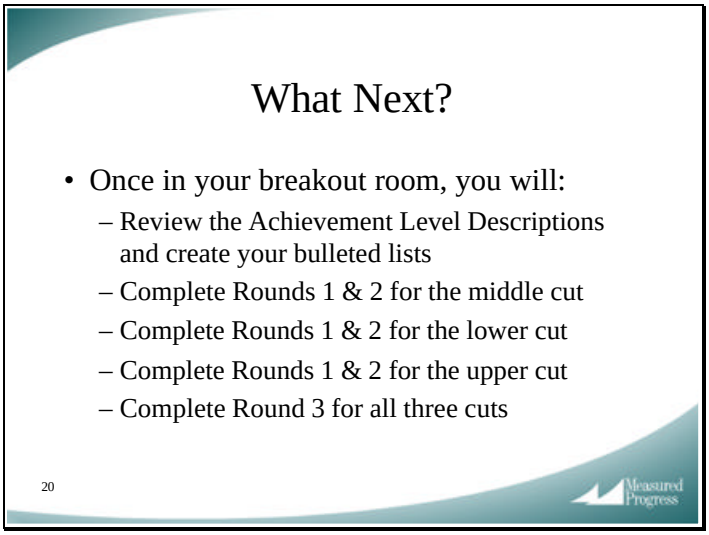



Slide 20

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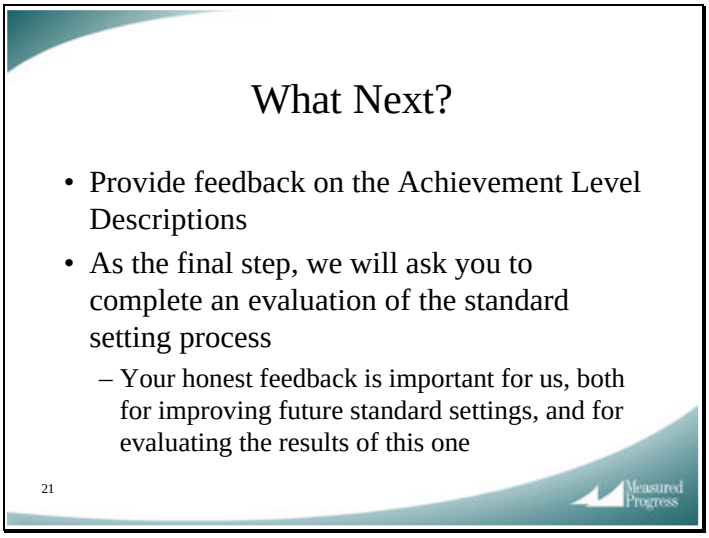

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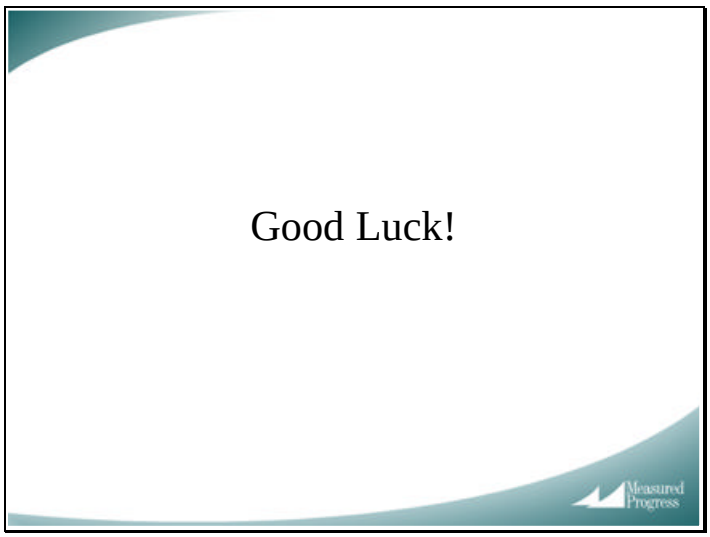

# APPENDIX F: FACILITATOR SCRIPT

# GENERAL INSTRUCTIONS FOR GROUP FACILITATORS
# (MAP-A) SCIENCE STANDARD SETTING

## June 3 and 4, 2008

### Introductions

1. Welcome group, introduce yourself (name, affiliation, a little selected background information).
2. Have each participant introduce him/herself.
3. Ask participants to complete Non-Disclosure Forms. Collect forms

### Review Assessment Materials

*Overview:* Some of the panelists administered the assessment to students, while others did not. In order to ensure that all panelists have an understanding of the knowledge and skills assessed, thoroughly review the student portfolios and APIs with the group.

1) Review the student portfolios
2) Review the APIs

### Discuss Achievement Level Descriptions

***Overview:*** In order to establish a thorough understanding of the expected performance of students on the test, panelists must have a clear understanding of:

1) the definition of the four achievement levels, and
2) what the key characteristics are that distinguish students in adjacent achievement level categories.

The purpose of this activity is for the panelists to come to consensus about what characterizes students in each of the four achievement level categories. This activity is critical since the ratings panelists will be making in Rounds 1 through 3 will be based on these understandings.

Activities:

1. Introduce task. In this activity they will:
    a. Individually review the Achievement Level Descriptions;
    b. discuss Descriptions as a group; and
    c. generate bulleted lists that describe the main characteristics that define students in each achievement level category.

2. Have panelists individually review all Achievement Level Descriptions. They can make notes if they like. The goal here is for the panelists to come to a common understanding of what it means to be in each achievement level. It is not unusual for panelists to

disagree with the descriptions they will see; almost certainly there will be some panelists who will want to change them. However, the task at hand is for panelists to have a common understanding of what knowledge, skills, and abilities are described by each Achievement Level Description. Panelists will have an opportunity to provide feedback and suggestions for edits to the Descriptors after the standard setting activities are completed.

3. After individually reviewing the Descriptions, have the panelists discuss each one as a group, starting with *Basic*, and provide clarification. The purpose of this is to have a collegial discussion in which to bring up/clarify any issues or questions that any individual may have and to reach consensus on an understanding of the description.

4. During the discussion for each achievement level, using chart paper, create a bulleted list for each level, specifying the characteristics that best describe students in that level. The panelists want to answer the question, what characteristics must a student demonstrate in order to be classified in the *Basic* category. Or, put another way, what are the most important characteristics that distinguish a *Below Basic* student from a student in the *Basic* category. They will then repeat this process for the *Proficient* and *Advanced* categories.

## Ratings: Middle Cut

***Overview of Middle Cut Ratings:*** The panelists will begin the rating process by separating the MAP-As into two piles, those that represent performance that is below proficient (*Below Basic* or *Basic*) vs. proficient or above (*Proficient* or *Advanced*). The ratings will be done in two rounds. The first round will be done individually, without consulting with their colleagues. In the second round, they will have an opportunity to discuss their Round 1 ratings with the other panelists.

***Middle Cut Round 1:*** The first step in the process will be for the panelists to individually review the MAP-As, beginning with #1, and then every fifth MAP-A after that (i.e., #6, #11, etc.). Once they have narrowed in on the MAP-As they feel are near the cut point between below proficient and proficient or above, they will review all the MAP-As in that range. As they proceed through the MAP-As, the panelists should ask themselves whether the knowledge, skills and abilities demonstrated in each are consistent with performance that is below proficient, or proficient or above. At the end of Round 1, each panelist will complete the Round 1 section of the Middle Cut Rating Form, indicating the level they feel each MAP-A should be categorized into.

Activities:

1. Make sure panelists have the following materials:
    a. Set of MAP-As
    b. Achievement Level Descriptions
    c. Rating Form for the Middle Cut

2. Orient panelists to the set of MAP-As. Explain that the MAP-As are ordered by the student's total raw score, which was obtained using a straight forward summing of the 2

content entries (3 domain scores summed = content entry score.) Make sure they know that, if they disagree with the order of the MAP-As, they are free to categorize them as they feel appropriate, regardless of their ordering. For example, if they feel that MAP-A #15 represents performance that is proficient or above, but #16 (which has a higher total score) represents below proficient performance, they should categorize them as such.

3. Provide an overview of Round 1. Emphasize the following:
    a. The primary purpose is to separate the MAP-As into two piles.
    b. Panelists will be working individually in this round, without consulting with their colleagues. They will have opportunities in Rounds 2 and 3 to discuss their categorizations and make changes.
    c. Each panelist needs to base his/her judgments on his/her experience with the content, understanding of students, and the Achievement Level Descriptions.
    d. If panelists are struggling with categorizing a particular MAP-A, they should use their best judgment and move on. They will have an opportunity to revise their categorizations.
    e. Panelists should feel free to take notes if there are particular points about a certain MAP-A and how they think it should be categorized that they would like to discuss in Round 2.

4. Go over the rating form with panelists:
    a. Have panelists write their ID number on the rating form. The ID number is on their name tag.
    b. Lead panelists through a step-by-step demonstration of how to fill in the rating form.
    c. There should be one and only one checkmark in each row for each round of ratings.

5. Give panelists an opportunity to ask questions about their task in Round 1, then tell them they may begin.

6. Have panelists individually review the MAP-As, beginning with #1, and then every fifth one after that (i.e., #6, #11, etc.), ending with the last MAP-A. It is important that panelists continue all the way through the last MAP-A so they have a good sense of the entire range of performance represented. As they are reviewing the MAP-As, the panelists should keep in mind the Achievement Level Descriptions. They should consider the knowledge, skills and abilities demonstrated by each and how they relate to the definitions of the achievement levels. As they complete each MAP-A, have them place it into one of two piles: below proficient, vs. proficient or above.

7. Once they have narrowed in on the MAP-As they feel are near the cut point between below proficient and proficient or above, they will review all the MAP-As in that range, again placing each in the appropriate pile. **Note**: the panelists will not be reviewing all of the MAP-As at this time; this is done intentionally, to break the work into more manageable pieces.

8. Panelists may want to take notes as they work.

9. Once panelists have finished sorting the MAP-As, they will fill in the Round 1 section of the Middle Cut Rating Form.

10. As panelists complete the task, ask them to carefully inspect their rating forms to ensure they are filled out properly.
    a. The ID number must be filled in.
    b. Each MAP-A must be assigned to one and only one achievement level.
    c. Although the MAP-As are presented in order from lowest- to highest-scoring, the panelists' category assignments do not need to be in strictly increasing order.

***Middle Cut Round 2:*** In Round 2, the panelists will discuss their categorizations of the MAP-As into the two levels as a large group. After the discussions are complete, the panelists will do their second round of ratings.

Activities:

1. Make sure panelists have the following materials:
    a. Set of MAP-As
    b. Achievement Level Descriptions
    c. Rating Form for the Middle Cut

2. Using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each category (below proficient vs. proficient or above).

3. Beginning with the first MAP-A for which there was disagreement as to its categorization, the panelists will discuss their rationale for categorizing it as they did.
    a. Panelists only need to discuss those MAP-As for which there was disagreement as to how they should be categorized.
    b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
    c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
    d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
    e. As they finish the discussion for each MAP-A, each panelist should once again place it into the appropriate pile.

    Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions than the rest of the group. **It is O.K. for panelists to disagree,**

**but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

4. Once the discussions have been completed, each panelist will complete the Round 2 section of the Middle Cut Rating Form, again indicating the level they feel each MAP-A should be categorized into.

## Ratings: Lower Cut

***Overview of Lower Cut Ratings:*** Once Rounds 1 and 2 have been completed for the middle cut, the process will be repeated for the lower cut. The panelists will set aside the pile of MAP-As that they have classified as proficient or above, and work only with the MAP-As they feel are below proficient. Working their way through each MAP-A in the pile, the panelists will subdivide them into two new piles: *Below Basic* and *Basic*. As with the middle cut ratings, in the first round of ratings, panelists will work individually and, in the second round, they will have an opportunity to discuss their categorizations before making their second round ratings.

***Lower Cut Round 1:*** The process here will be basically the same as for the middle cut, except that they will be subdividing the MAP-As they categorized as below proficient into two achievement levels: *Below Basic* and *Basic*. They will individually work their way through each of the MAP-As they categorized as below proficient. As they proceed through the MAP-As, the panelists should ask themselves whether the knowledge, skills and abilities demonstrated in each are consistent with performance that is *Below Basic*, or *Basic*. At the end of Round 1, each panelist will complete the Round 1 section of the Lower Cut Rating Form, indicating the level they feel each MAP-A should be categorized into.

Activities:

1. Make sure panelists have the following materials:
    a. Set of MAP-As
    b. Achievement Level Descriptions
    c. Rating Form for the Middle Cut
    d. Rating Form for the Lower Cut
    e. Rating Form for the Upper Cut (they will be preparing it for when they get to the upper cut ratings)

2. Ask the panelists to transfer their ratings in the Round 2: Proficient or Above column of the Middle Cut Rating Form into the Proficient or Above columns of the Lower Cut Rating Form; the ratings should be entered into the Proficient or Above column for both rounds. Once they have done that, have them transfer their Below Proficient ratings onto the Upper Cut Rating Form, again placing them in the Below Proficient columns for both rounds.

3. Have the panelists place the pile of MAP-As they categorized as above proficient, as well as the Upper Cut Rating Form, aside, where they will be out of their way.

4. Have the panelists individually review each MAP-A in their below proficient pile; they will have reviewed some of them while doing their middle cut ratings, but they should revisit those briefly to refresh their memory.

5. As they are reviewing the MAP-As, the panelists should keep in mind the Achievement Level Descriptions. They should consider the knowledge, skills and abilities demonstrated by each and how they relate to the definitions of the achievement levels. As they complete each MAP-A, have them place it into one of two piles: *Below Basic* or *Basic*.

6. **Note**: Because the panelists will be reviewing some MAP-As for the first time in this step, it is possible that they may feel that one or more should have been placed in the proficient or above pile in the previous step. Tell them that, in that case, they should categorize it as *Basic* for the time being, but make a note on it indicating that it needs to be recategorized. They will have an opportunity in Round 3 to change any of the categorizations; for now, however, they may not move MAP-As out of the below proficient category.

7. Once panelists have finished sorting the MAP-As, they will fill in the Round 1 section of the Lower Cut Rating Form.

8. As panelists complete the task, ask them to carefully inspect their rating forms to ensure they are filled out properly.
    a. The ID number must be filled in.
    b. Each MAP-A must be assigned to one and only one achievement level.
    c. Although the MAP-As are presented in order from lowest- to highest-scoring, the panelists' category assignments do not need to be in strictly increasing order.

***Lower Cut Round 2:*** In Round 2, the panelists will discuss their categorizations of the MAP-As into the two levels as a large group. After the discussions are complete, the panelists will do their second round of ratings.

Activities:

1. Make sure panelists have the following materials:
    a. Set of MAP-As
    b. Achievement Level Descriptions
    c. Rating Form for the Lower Cut

2. Using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each category. In this case, you will be including three categories: *Below Basic, Basic,* and proficient or above. Even though the panelists will be confining their discussions to the *Below Basic/Basic* cut, including all three categories on the chart paper should help minimize any confusion.

3. Beginning with the first MAP-A for which there was disagreement as to whether it should be categorized as *Below Basic* or *Basic*, the panelists will discuss their rationale for categorizing it as they did.
    a. Panelists only need to discuss those MAP-As for which there was disagreement as to whether it should be categorized as *Below Basic* or *Basic*.
    b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
    c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
    d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
    e. As they finish the discussion for each MAP-A, each panelist should once again place it into the appropriate pile.

    Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions than the rest of the group. **It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

4. Once the discussions have been completed, each panelist will complete the Round 2 section of the Lower Cut Rating Form, again indicating the level they feel each MAP-A should be categorized into.

5. Check the Round 2 section of the Lower Cut Rating Form to ensure they have been completed properly and deliver the forms to the war room for data entry. These forms will be returned to the panelists to facilitate with Round 3.

## Ratings: Upper Cut

***Overview of Upper Cut Ratings:*** Once Rounds 1 and 2 have been completed for the middle and lower cuts, the process will be repeated one more time for the upper cut. The panelists will set aside the two piles of MAP-As that they have classified as either *Below Basic* or *Basic*, and work only with the MAP-As they feel are proficient or above. Working their way through each MAP-A in the pile, the panelists will subdivide them into two new piles: *Proficient* and *Advanced*. As with the middle and lower cut ratings, in the first round of ratings, panelists will work individually and, in the second round, they will have an opportunity to discuss their categorizations before making their second round ratings.

***Upper Cut Round 1:*** The process here will be basically the same as for the lower cut, except that they will be subdividing the MAP-As they categorized as proficient or above into two achievement levels: *Proficient* and *Advanced*. They will individually work their way through each of the MAP-As they categorized as proficient or above. As they proceed through the MAP-

As, the panelists should ask themselves whether the knowledge, skills and abilities demonstrated in each are consistent with performance that is *Proficient*, or *Advanced*. At the end of Round 1, each panelist will complete the Round 1 section of the Upper Cut Rating Form, indicating the level they feel each MAP-A should be categorized into.

Activities:

1. Make sure panelists have the following materials:
    a. Set of MAP-As
    b. Achievement Level Descriptions
    c. Rating Form for the Upper Cut

2. Have the panelists place the piles of MAP-As they categorized as *Below Basic* or *Basic* aside, where they will be out of their way.

3. Have the panelists individually review each MAP-A in their proficient or above pile; they will have reviewed some of them while doing their middle cut ratings, but they should revisit those briefly to refresh their memory.

4. As they are reviewing the MAP-As, the panelists should keep in mind the Achievement Level Descriptions. They should consider the knowledge, skills and abilities demonstrated by each and how they relate to the definitions of the achievement levels. As they complete each MAP-A, have them place it into one of two piles: *Proficient* or *Advanced*.

5. **Note**: Because the panelists will be reviewing some MAP-As for the first time in this step, it is possible that they may feel that one or more should have been placed in the below proficient pile in the first step. Tell them that, in that case, they should categorize it as *Proficient* for the time being, but make a note on it indicating that it needs to be recategorized. They will have an opportunity in Round 3 to change any of the categorizations; for now, however, they may not move MAP-As out of the proficient or above category.

6. Once panelists have finished sorting the MAP-As, they will fill in the Round 1 section of the Upper Cut Rating Form.

7. As panelists complete the task, ask them to carefully inspect their rating forms to ensure they are filled out properly.
    a. The ID number must be filled in.
    b. Each MAP-A must be assigned to one and only one achievement level.
    c. Although the MAP-As are presented in order from lowest- to highest-scoring, the panelists' category assignments do not need to be in strictly increasing order.

***Upper Cut Round 2:*** In Round 2, the panelists will discuss their categorizations of the MAP-As into the two levels as a large group. After the discussions are complete, the panelists will do their second round of ratings.

Activities:

1. Make sure panelists have the following materials:
    a. Set of MAP-As
    b. Achievement Level Descriptions
    c. Rating Form for the Upper Cut

2. Using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each category. In this case, you will be including three categories: below proficient, *Proficient*, and *Advanced*. Even though the panelists will be confining their discussions to the *Proficient/Advanced* cut, including all three categories on the chart paper should help minimize any confusion.

3. Beginning with the first MAP-A for which there was disagreement as to whether it should be categorized as *Proficient* or *Advanced*, the panelists will discuss their rationale for categorizing it as they did.
    a. Panelists only need to discuss those MAP-As for which there was disagreement as to whether they should be categorized as *Proficient* or *Advanced*.
    b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
    c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
    d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
    e. As they finish the discussion for each MAP-A, each panelist should once again place it into the appropriate pile.

    Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions than the rest of the group. **It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

4. Once the discussions have been completed, each panelist will complete the Round 2 section of the Upper Cut Rating Form, again indicating the level they feel each MAP-A should be categorized into.

5. Check the Round 2 section of the Upper Cut Rating Form to ensure they have been completed properly and deliver the forms to the war room for data entry. These forms will be returned to the panelists to facilitate with Round 3.

## Tabulation of Round 2 Results

Once Round 2 has been completed for all three cuts, the data will be analyzed and information will be provided that the panelists will use for Round 3.

## Ratings: Round 3 – All Cuts

***Overview of Round 3:*** The primary purpose of Round 3 is to ask the panelists to discuss their Round 2 ratings for all three cuts as a whole group and to revise their ratings on the basis of that discussion. They will discuss their ratings in the context of the ratings made by other members of the group. Prior to beginning the Round 3 discussions, using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each of the four achievement level categories. Also show on the chart paper which MAP-As will be assigned to each level according to the group mean cut points from Round 2 (you will be provided this information by the data analysis team). Focusing on the MAP-As that are near the cut points, the panelists will discuss why they categorized each MAP-A as they did, making sure that all different points of view are included in the discussion.

To aid with the discussion, panelists will also be given impact data, showing the approximate percentage of students who would be classified into each achievement level category based on the room mean cut points from Round 2.

This round will be similar to the Round 2 discussions, except that the panelists will be discussing all three cut points. The purpose of this round is to look at the results holistically, rather than each cut individually. Therefore, the panelists should start the discussions with the lower cut, then proceed to the middle cut and, finally, the upper cut.

Once panelists have reviewed and discussed the Round 2 categorizations, they will be given the opportunity to change or revise their Round 2 ratings.

Activities:

1. Make sure panelists have the following materials:
    a. The Round 3 rating form
    b. Set of MAP-As
    c. Achievement Level Descriptions

2. Have panelists write their ID number on the rating form.

3. Provide an overview of Round 3. Paraphrase the following:
    a. As in Rounds 1 and 2, the primary purpose is to categorize each MAP-A into the achievement level category where you feel it belongs.
    b. Each panelist needs to base his/her judgments on his/her experience with the content area, understanding of students, discussions with other panelists and the knowledge, skills, and abilities required to answer each item.
    c. In addition to the categorization of each MAP-A, panelists should also consider the impact data: based on their knowledge of students and the Achievement Level Descriptions, do the percentages of students falling into each category make

sense? If they do, that is an indication that the cut points are placed appropriately. If they don't, the panelists may want to consider revising their ratings.

4. Review the feedback information with the panelists.
    a. Show the panelists how the MAP-As will be categorized based on the room mean Round 2 cut point placements.
    b. Go over the impact data, explaining that if the Round 2 ratings were to be used to set the final cut points, these are the approximate percentages of students who would be classified into each achievement level category.

5. Give panelists an opportunity to ask questions about the feedback information or about the task for Round 3.

6. Beginning with the MAP-As for which there was disagreement as to whether they should be categorized as *Below Basic* or *Basic*, the panelists should begin discussing the categorization of the MAP-As according to the Round 2 ratings. Once they have completed the discussion for the lower cut, they will then proceed to the middle cut and then, finally, to the upper cut.
    a. Panelists only need to discuss those MAP-As for which there was disagreement as to how they should be categorized.
    b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
    c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
    d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
    e. As they finish the discussion for each MAP-A, each panelist should place it into one of four piles: *Below Basic*, *Basic*, *Proficient*, or *Advanced.*

    Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions. **It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

7. Once the discussions are complete for the full set of MAP-As, have the panelists fill in the Round 3 Rating Form. When you collect the rating forms, carefully inspect them to ensure they are filled out properly.
    a. The ID number must be filled in.
    b. Each MAP-A for Round 3 must have one (and only one) rating.

## Grade Level Achievement Level Descriptors

After recommended cut scores have been established for the grade spans, the panels will be asked to revisit the draft achievement level descriptors. They will be asked to make recommendations for language that is teacher and parent friendly.

## Complete Evaluation Form

Upon completion of the standard setting process, have panelists fill out the evaluation form. Emphasize that their honest feedback is important.

# APPENDIX G: STANDARD SETTING PANELISTS

| 2008 MAP-A Science Standard Setting Panelist Distribution | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Elementary Panel** | | **RPDC #** | **Middle School Panel** | | **RPDC #** | **High School Panel** | | **RPDC #** |
| ***Science Teachers*** | Amy | Barlow | **1** | Dennis | Kocher | **9** | Paul | Rutherford | **3** |
| | John | Dyck | **9** | Melissa | Eckert | **8** | | | |
| ***Parents*** | | | | Ellen | Rowland | **3** | | | |
| ***Administrators*** | Sheryl | Alermatt | | Regina | Higgins | **9** | Walt | Brown | **3** |
| | Kathie | Wolff | **8** | John | Palmer | **8** | Christine | Taylor | **6** |
| | Meg | Sneed | **3** | | | | Becky | Killian | **7** |
| | Mary | Gage | **9** | | | | Diana | Humphreys | **2** |
| ***Spec. Ed. Teachers*** | Christine | Bates | **6** | Glenn | Dalton | **1** | Mindy | Brown | **3** |
| | Ronda | Brown | **3** | Jennifer | Siem | **8** | John | Cox | **6** |
| | Jennifer | Johnson | **6** | Nicole | Martinez | **3** | Lynn | Wapelhurst | **2** |
| | Catherine | McCormack | **4** | Leslie | Laws | **7** | Marsha | Meeker | **4** |
| | Susie | Register | **2** | Sneh | Kothari | **8** | Rachael | Thompson | **6** |
| | Laura | Borghardt | **2** | Heather | Suerig | | Ronda | McDaniel | **1** |
| | | | | Kathy | Gregory | **8** | | | |

| RPDC Code Key | |
|---|---|
| SE-Cape Girardeau | 1 |
| Heart of MO-Columbia | 2 |
| Kansas City | 3 |
| NE/Truman-Kirksville | 4 |
| NW-Maryville | 5 |
| S Central-Rolla | 6 |
| SW-Springfield | 7 |
| St. Louis | 8 |
| Central-Warrensburg | 9 |

# APPENDIX H: PANELIST DESCRIPTOR RECOMMENDATIONS

**MAP-A Draft Achievement Level Descriptors**
**Recommendations**

| | Science |
|---|---|
| **Below Basic** | Student has a minimal understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work evidence may be loosely connected to the strands. Student likely requires extensive verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Basic** | Student has a fundamental understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work evidence is somewhat connected to the strands. Student likely requires frequent verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge and/or application of these concepts. |
| **Proficient** | Student has a sound understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work evidence is connected to the strands and demonstrates application. Student likely requires some verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |
| **Advanced** | Student has a strong understanding of the concepts contained in the grade appropriate APIs within the strands of Scientific Inquiry, Impact of Science, Technology, and Human Activity, Characteristics and Interactions of Living Organisms and Changes in Ecosystems and Interactions of Organisms with Their Environment. Student work evidence is strongly connected to the strands and demonstrates strong application. Student likely requires minimal verbal, visual and/or physical task-specific assistance in order to demonstrate knowledge of these concepts. |

# APPENDIX I: EVALUATION RESULTS

## OVERALL

| | Very Good | Good | Unsure | Poor | Very Poor | N |
|---|---|---|---|---|---|---|
| What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment? | 7 | 17 | 8 | 2 | 1 | 35 |
| | **Very Clear** | **Clear** | **Somewhat Clear** | **Not Clear** | | **N** |
| How clear were you with the achievement level descriptors? | 8 | 17 | 9 | 1 | | 35 |
| | **About Right** | **Too little time** | **Too much time** | | | **N** |
| How would you judge the length of time of this meeting for setting performance standards | 26 | 7 | 2 | | | 35 |
| What factors influenced the standards you set? | **Not at all Influential 1** | **2** | **Moderately Influential 3** | **4** | **Very Influential 5** | **N** |
| The achievement level descriptors | | 3 | 20 | 12 | | 35 |
| The assessment samples | | | 8 | 13 | 14 | 35 |
| Other panelists | 1 | 4 | 18 | 10 | 2 | 35 |
| My experience in the field | | 2 | 10 | 17 | 5 | 34 |
| | **Definitely Yes** | **Probably Yes** | **Unsure** | **Probably No** | **Definitely No** | **N** |
| Do you believe the cut scores set by the panel are correctly placed on the exam score scale? | 4 | 21 | 8 | 1 | 1 | 35 |
| How could the standard setting process have been improved? | **See GradeSpan/Content Area Results** | | | | | |

| For each statement below, please circle the rating that best represents your judgment. | **Not at all Useful/Clear 1** | **2** | **3** | **4** | **Very Useful/Clear 5** | **N** |
|---|---|---|---|---|---|---|
| The opening session was: | | 1 | 13 | 17 | 3 | 34 |
| The achievement level descriptors were: | 1 | 1 | 7 | 21 | 4 | 34 |
| Providing additional details to the achievement level descriptors was: | 2 | 2 | 9 | 14 | 8 | 35 |
| The discussion with other panelists was: | | | 4 | 16 | 15 | 35 |
| The portfolio rating task was: | | 3 | 9 | 20 | 2 | 34 |
| The impact data provided prior to the last round of ratings was: | | | 10 | 15 | 6 | 31 |

## GRADE 5

| | Very Good | Good | Unsure | Poor | Very Poor | N |
|---|---|---|---|---|---|---|
| What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment? | 1 | 7 | 4 | | | 12 |
| | **Very Clear** | **Clear** | **Somewhat Clear** | **Not Clear** | | **N** |
| How clear were you with the achievement level descriptors? | 2 | 5 | 5 | | | 12 |
| | **About Right** | **Too little time** | **Too much time** | | | |
| How would you judge the length of time of this meeting for setting performance standards | 10 | 2 | | | | 12 |
| What factors influenced the standards you set? | **Not at all Influential 1** | **2** | **Moderately Influential 3** | **4** | **Very Influential 5** | **N** |
| The achievement level descriptors | | | | 8 | 4 | 12 |
| The assessment samples | | | 3 | 4 | 5 | 12 |
| Other panelists | | 3 | 5 | 3 | 1 | 12 |
| My experience in the field | | 2 | 5 | 4 | | 11 |
| | **Definitely Yes** | **Probably Yes** | **Unsure** | **Probably No** | **Definitely No** | **N** |
| Do you believe the cut scores set by the panel are correctly placed on the exam score scale? | 1 | 7 | 4 | | | 12 |

~ I've looked at ALL aspects of the portfolio to make a determination.
~ We had a variety of people with different backgrounds, providing input.
~ There were very few numbered MAP-A's that I had to place in a higher or level cut score category.
~ We had a little trouble coming to a consensus, but overall I believe we had a good cut scores.
~ Some people in our group have done work in scoring MAP-A and I think they lowered our cut scores.
~ Yes - but it is concerning that so many were below basic because they didn't connect to the standards - it seems the teachers were not clear on how to set up their MAP-A.
~ We seemed somewhat sure but still had some voiced concerns.
~ I felt that everyone put time and their knowledge to make the best judgment. The decisions made were pretty clear cut.
~ There was some disagreement on a few items. Also, the way they were scored (ordered) was not necessarily the way I felt they should have been.
~ We had lots of discussion about the portfolios and had great difficulty with understanding why portfolio #17 ranked so high.
~ Questionable due to being 1st year for science other than pilot - appears that more training needed regarding connection to standards. Facilitator needs to be either trained or experienced to expedite process to ask guiding questions.

**How could the standard setting process have been improved?**~ More descriptive (measureable words) achievement level descriptors.~ A more clearly defined explanation of what factors should not influence our rating. For example, should we consider data errors, should we penalize for activity descriptions not matching accuracy and independence explanations.~ Note: one panelist was very unprofessional in that she put feet upon another chair with shoes off. Very distracting and took away from the setting. ~ Additionally training on how the portfolios were scored. What made some unscorable, etc!~ Explain more about the scores at the beginning. Being a first time standard setter, I did not really understand the process and why we were making cut scores. ~ Maybe more insight into the scoring process before we did our part. It was hard to tell why some of the portfolios were ranked high or low and with out knowing what made part of a portfolio "unscorable" we were unsure of how to rate the other part. ~ Our facilitator needed a bit ore training and knowledge regarding the process. When the tests are given to us are #1 low to ? high are we not somewhat biased? ~ The facilitator did a good job - but I think it would have helped her to have more training herself in the actual MAP-A. She stated she was unfamiliar with our test. ~ Our leader from Measured Progress, Amanda was very nervous. I feel she needed more training. She was not familiar with the assessment.~ By perhaps not giving the panelist the portfolio in scored order - it seems to influence the decisions.

| For each statement below, please circle the rating that best represents your judgment. | **Not at all Useful/Clear 1** | **2** | **3** | **4** | **Very Useful/Clear 5** | **N** |
|---|---|---|---|---|---|---|
| The opening session was: | | 1 | 7 | 4 | | 12 |
| The achievement level descriptors were: | | 1 | 4 | 5 | 1 | 11 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Providing additional details to the achievement level descriptors was: | | | 4 | 4 | 4 | 12 |
| The discussion with other panelists was: | | | 1 | 4 | 7 | 12 |
| The portfolio rating task was: | | 1 | 6 | 5 | | 12 |
| The impact data provided prior to the last round of ratings was: | | | 7 | 3 | 1 | 11 |

**Please provide any additional comments or suggestions about the standard setting process.**

~ I really need to look at this measurement and process as a whole.
~ Many of our MAP-A's were poorly scored. This made it difficult to make a clear decision. A lot of down time.
~ Referring to #11 above. The rating task was not explained well, by our Elementary adequately trained and didn't stay with the group throughout the process. Many cell phone interruptions gave the appearance she was more concerned with things out of the room/city than here.
~ The proctors need more training!
~ I think people who have never given the MAP-A had a great disadvantage in this process. I felt sorry for the science teachers because they really didn't understand or have prior knowledge. Maybe they could have an extra session at the beginning to explain more about the MAP-A in general. We had too much down time in the afternoon of the 2nd day! It took an hour for us to get back our scores. Is there any way this could be organized in a different way so we wouldn't have to wait to get the cut scores back?
~ More than 1 statistician is needed.
~ May need more than 1 statistician for the process.
~ Hard to determine rating with unscorable portfolios. Didn't know if it should be ignored or figured in...Also, felt bad for our leader ---definitely needed more training.
~ There was a large amount of down time.
~ Having a 2nd statistician would have helped move the process along faster.

## GRADE 8

| | Very Good | Good | Unsure | Poor | Very Poor | N |
|---|---|---|---|---|---|---|
| What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment? | 1 | 5 | 3 | 2 | 1 | 12 |
| | **Very Clear** | **Clear** | **Somewhat Clear** | **Not Clear** | | **N** |
| How clear were you with the achievement level descriptors? | 1 | 8 | 2 | 1 | | 12 |
| | **About Right** | **Too little time** | **Too much time** | | | |
| How would you judge the length of time of this meeting for setting performance standards | 6 | 5 | 1 | | | 12 |
| What factors influenced the standards you set? | **Not at all Influential 1** | **2** | **Moderately Influential 3** | **4** | **Very Influential 5** | **N** |
| The achievement level descriptors | | | 1 | 7 | 4 | 12 |
| The assessment samples | | | 3 | 4 | 5 | 12 |
| Other panelists | 1 | | 6 | 4 | 1 | 12 |
| My experience in the field | | | 2 | 7 | 3 | 12 |
| | **Definitely Yes** | **Probably Yes** | **Unsure** | **Probably No** | **Definitely No** | **N** |
| Do you believe the cut scores set by the panel are correctly placed on the exam score scale? | 3 | 7 | 2 | | | 12 |

~ Much group discussion
~ The curve is balanced and shows the skill levels of these students appropriately.
~ After discussions within our group I believe the reasons why a panelist put a portfolio in a certain category were justified.
~ Seems like an appropriate proportion
~ I think a lot of this is very subjective not objective.
~ I thought we were right on! Our scores came out 50/50.

**How could the standard setting process have been improved?**~ Simplify~ I think it would have been beneficial to know the process the end result. I don't believe that was explained very well. The first day was very frustrating! We did not see the purpose and we were not sure what we were being asked to do. The second day was much better!~ At times, conversations were rambling and not conducive to overall findings on scorable papers. ~ The purpose was unclear, process seemed random, making it feel unimportant and irrelevant. ~ Anchor papers~ It seems we had different rules for every level and very little consistency. It also seems it is the first year and people wouldn't really know what to do. ~ More clarity on B, BB, P and A levels. ~ Redefining or elaborating the achievement level descriptors was very confusing and made our work get off to a different start.

| For each statement below, please circle the rating that best represents your judgment. | **Not at all Useful/Clear 1** | **2** | **3** | **4** | **Very Useful/Clear 5** | **N** |
|---|---|---|---|---|---|---|
| The opening session was: | | | 5 | 4 | 2 | 11 |
| The achievement level descriptors were: | 1 | | 2 | 7 | 2 | 12 |
| Providing additional details to the achievement level descriptors was: | 2 | 2 | 4 | 3 | 1 | 12 |
| The discussion with other panelists was: | | | 2 | 7 | 3 | 12 |
| The portfolio rating task was: | | 2 | 2 | 6 | 1 | 11 |
| The impact data provided prior to the last round of ratings was: | | | 2 | 6 | 2 | 10 |

**Please provide any additional comments or suggestions about the standard setting process.**
~ It took much time for me to catch on to the what were to look at and consider as we analyzed each portfolio - some prior and further explanation may have helped - some example.
~ Our facilitator was not sure what we were suppose to be doing, it was not until after lunch that she was able to tell us what information we needed to consider. I also felt the "rules" changed between rounds. After we found out what we were supposed to do, it was much better. I just felt sometime was wasted.
~ Validity is questioned as there appears to be different rules in almost every round.
~ There seemed to be a lack of significance.
~ Descriptors were very non-descriptive and having facilitators who weren't allowed to help as very frustrating.

## GRADE 11

| | Very Good | Good | Unsure | Poor | Very Poor | N |
|---|---|---|---|---|---|---|
| What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment? | 5 | 5 | 1 | | | 11 |
| | **Very Clear** | **Clear** | **Somewhat Clear** | **Not Clear** | | **N** |
| How clear were you with the achievement level descriptors? | 5 | 4 | 2 | | | 11 |
| | **About Right** | **Too little time** | **Too much time** | | | |
| How would you judge the length of time of this meeting for setting performance standards | 10 | | 1 | | | 11 |
| What factors influenced the standards you set? | **Not at all Influential 1** | **2** | **Moderately Influential 3** | **4** | **Very Influential 5** | **N** |
| The achievement level descriptors | | | 2 | 5 | 4 | 11 |
| The assessment samples | | | 2 | 5 | 4 | 11 |
| Other panelists | | 1 | 7 | 3 | | 11 |
| My experience in the field | | | 3 | 6 | 2 | 11 |
| | **Definitely Yes** | **Probably Yes** | **Unsure** | **Probably No** | **Definitely No** | **N** |
| Do you believe the cut scores set by the panel are correctly placed on the exam score scale? | | 7 | 2 | 1 | 1 | 11 |

~ I feel that teacher training is a significant factor in the %'s. Teachers need more training in #1 assessment as well as content. ~ Different factors such as: teacher knowledge science application to goals of student individually. ~ With a variety of expertise in the room, explanations and discussions, the cohesiveness of the group allowed for a positive and productive score setting.~ Below basic and basic were off balance. ~ Originally the cut between below basic and basic was too broad making the below basic too high ( a lot of unscorable portions). So will depend on how final cut went. ~ We looked at the samples very carefully. However, there were a lot of unscorable entries that messed up the placements.~ We readjusted. Should fall out okay. ~ The gaps were not as expected. Cut off scores were to unequal at lower level.

**How could the standard setting process have been improved?**

~ using a smaller number of people per grade level - 1 each of all categories of people - 1 science, 1 reg teacher 1 reg. sped, etc.
~ more chocolate.
~ Don't make us check out @ noon from the hotel - either stay another night or have us finish @ noon.
~ This was a learning experience. I see no improvements.
~ Too much time when some people could not go on and had long wait times between activities.
~ For us to not have gotten them in order but rather by "letter" so we wouldn't have a pre-conceived idea of ranking.
~ Training of teachers implementing the MAP-A needs to before intensive. Many of the errors/unscorables might have been teacher training issues.
~ no suggestions - it went well.
~ A training session for those unfamiliar with MAP-A might be helpful.

| For each statement below, please circle the rating that best represents your judgment. | **Not at all Useful/Clear 1** | **2** | **3** | **4** | **Very Useful/Clear 5** | **N** |
|---|---|---|---|---|---|---|
| The opening session was: | | | 1 | 9 | 1 | 11 |
| The achievement level descriptors were: | | | 1 | 9 | 1 | 11 |
| Providing additional details to the achievement level descriptors was: | | | 1 | 7 | 3 | 11 |
| The discussion with other panelists was: | | | 1 | 5 | 5 | 11 |
| The portfolio rating task was: | | | 1 | 9 | 1 | 11 |

| | | | | | | |
|---|---|---|---|---|---|---|
| The impact data provided prior to the last round of ratings was: | | | 1 | 6 | 3 | 10 |

**Please provide any additional comments or suggestions about the standard setting process.**

~ Being my first time I really have no additional comments or suggestion other than thank you for choosing me. This was an experience and enjoyed the time to meet other people.

~ It is always learning experience for me and I hope to continue to be able to be involved in it. Thank you.

~ Achievement level Descriptors.

~ Maybe connected on proficient clarified.

~ Basic (practice skill).

~ Good job Susan!

# APPENDIX J: PANELIST RESULTS

Table 1: Round 2 Ratings: Grade 5

| Portfolio | Raw Score | Panelist | | | | | | | | | | | | Performance Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | id_01 | id_02 | id_03 | id_04 | id_05 | id_06 | id_07 | id_08 | id_09 | id_10 | id_11 | id_12 | |
| 1 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 8 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 |
| 7 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 11 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 13 | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 | 13 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 |
| 16 | 13 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 17 | 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 18 | 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 19 | 15 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 |
| 20 | 15 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 |
| 21 | 16 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 22 | 16 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 23 | 17 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 24 | 17 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 |
| 25 | 18 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 26 | 18 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 3 |
| 27 | 19 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 |
| 28 | 19 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 |
| 29 | 20 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |
| 30 | 20 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 |
| 31 | 21 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 32 | 21 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 33 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 34 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

Table 2: Round 2 Ratings: Grade 8

| Portfolio | Raw Score | Panelist | | | | | | | | | | | | Performance Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | id_01 | id_02 | id_03 | id_04 | id_05 | id_06 | id_07 | id_08 | id_09 | id_10 | id_11 | id_12 | |
| 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 7 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| 7 | 8 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 |
| 8 | 8 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| 9 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 |
| 10 | 9 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 11 | 10 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 12 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 13 | 11 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 14 | 11 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 15 | 12 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 |
| 16 | 12 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 17 | 13 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 18 | 13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 |
| 19 | 14 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 |
| 20 | 14 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 21 | 15 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 |
| 22 | 15 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 |
| 23 | 16 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 |
| 24 | 16 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 |
| 25 | 17 | 4 | 1 | 2 | 2 | 1 | 3 | 3 | 1 | 1 | 2 | 1 | 4 | 3 |
| 26 | 17 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 27 | 18 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 |
| 28 | 18 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 |
| 29 | 19 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 30 | 19 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 31 | 20 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 32 | 20 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 33 | 21 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 34 | 21 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 35 | 22 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 36 | 22 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |

Table 3: Round 2 Ratings: Grade 11

| Portfolio | Raw Score | Panelist | | | | | | | | | | | Performance Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | id_01 | id_02 | id_03 | id_04 | id_05 | id_06 | id_07 | id_08 | id_09 | id_10 | id_11 | |
| 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| 8 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| 9 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 |
| 10 | 9 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 |
| 11 | 10 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| 12 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| 13 | 11 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 |
| 14 | 11 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 |
| 15 | 12 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 |
| 16 | 12 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 |
| 17 | 13 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| 18 | 14 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 |
| 19 | 14 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 |
| 20 | 15 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 21 | 15 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| 22 | 16 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 2 | 2 | 2 |
| 23 | 16 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | 1 | 2 | 2 | 2 | 2 |
| 24 | 17 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 3 |
| 25 | 17 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 26 | 18 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 27 | 18 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 28 | 19 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 29 | 19 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 3 |
| 30 | 20 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 31 | 20 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 32 | 21 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 |
| 33 | 21 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 4 |
| 34 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 35 | 22 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |

Table 4: Round 3 Ratings: Grade 5

| Portfolio | Raw Score | Panelist | | | | | | | | | | | | Performance Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | id_01 | id_02 | id_03 | id_04 | id_05 | id_06 | id_07 | id_08 | id_09 | id_10 | id_11 | id_12 | |
| 1 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 8 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 |
| 7 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 11 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 13 | 12 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 |
| 14 | 12 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 | 13 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 |
| 16 | 13 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 |
| 17 | 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 18 | 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 19 | 15 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 |
| 20 | 15 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 |
| 21 | 16 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 22 | 16 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 23 | 17 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 24 | 17 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 |
| 25 | 18 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 26 | 18 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 3 |
| 27 | 19 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 |
| 28 | 19 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 |
| 29 | 20 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |
| 30 | 20 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 |
| 31 | 21 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 32 | 21 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 33 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 34 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

Table 5: Round 3 Ratings: Grade 8

| Portfolio | Raw Score | Panelist | | | | | | | | | | | | Performance Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | id_01 | id_02 | id_03 | id_04 | id_05 | id_06 | id_07 | id_08 | id_09 | id_10 | id_11 | id_12 | |
| 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 7 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 7 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 |
| 7 | 8 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 8 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 10 | 9 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 2 |
| 11 | 10 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 12 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 13 | 11 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 14 | 11 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 15 | 12 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 |
| 16 | 12 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 17 | 13 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 18 | 13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 19 | 14 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 |
| 20 | 14 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 |
| 21 | 15 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 |
| 22 | 15 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 23 | 16 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 |
| 24 | 16 | 3 | 2 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
| 25 | 17 | 4 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 4 | 3 |
| 26 | 17 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 27 | 18 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| 28 | 18 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 |
| 29 | 19 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| 30 | 19 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 31 | 20 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 |
| 32 | 20 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 |
| 33 | 21 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 34 | 21 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 35 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 36 | 22 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |

Table 6: Round 3 Ratings: Grade 11

| Portfolio | Raw Score | Panelist | | | | | | | | | | | Performance Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | id_01 | id_02 | id_03 | id_04 | id_05 | id_06 | id_07 | id_08 | id_09 | id_10 | id_11 | |
| 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 7 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| 9 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 |
| 10 | 9 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 |
| 11 | 10 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 12 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| 13 | 11 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 14 | 11 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 15 | 12 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| 16 | 12 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| 17 | 13 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 18 | 14 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| 19 | 14 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| 20 | 15 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 21 | 15 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| 22 | 16 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| 23 | 16 | 1 | 3 | 2 | 1 | 1 | 3 | 1 | 1 | 2 | 2 | 2 | 2 |
| 24 | 17 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 3 |
| 25 | 17 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 26 | 18 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 27 | 18 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 28 | 19 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 29 | 19 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 |
| 30 | 20 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 |
| 31 | 20 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 32 | 21 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 |
| 33 | 21 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 4 |
| 34 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 35 | 22 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |